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SPECIAL FEATURES IN THIS ISSUE

What 86 years have taught us about selecting labor

Administrative justice

Changes in cost of living

Wages and hours in slaughtering and meat-packing
industry

Baltimore & Ohio experiment in industrial cooper-
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Employment in selected industries

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MONTHLY LABOR REVIEW

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MAY, 1924

What 86 Years Have Taught Us About Selecting Labor¹

By HORACE B. CHENEY, OF CHENEY BROS.

A POLICY based on guesswork instead of on facts is apt to be unsound and unsuccessful. The manufacturer who guesses at his financial condition can expect nothing better than failure. Yet too many let guessing take the place of knowledge in their relations with labor. They guess that a worker is fitted physically, mentally, and temperamentally to do a certain job—and in consequence they suffer from poor work, high unit labor costs, and excessive turnover. They guess that men are better workers than women, they guess that long service always means good work, and often they guess at what the worker should be paid. We are convinced that hazy ideas on these subjects do not make for a sound labor policy, and so have substituted what we feel to be quite definite knowledge. While our records of production do not in detail go back over the entire 86 years of our existence, they do cover a sufficient number of years to give us a reasonably sound basis on which to work.

Before describing our methods in detail, let us get a clear idea of the factors that affect labor cost. These factors are not peculiar to our own business—the manufacture of silk fabrics. They are mostly fundamental to all manufacturing.

The labor cost per unit of any product, then, depends upon these influences:

1. The rate of wages paid.
2. The production per dollar of wages.
3. The quality of the goods produced.
4. How well fitted to the job the worker is, mentally and physically.
5. The worker's familiarity with the job.
6. How long he has been at the job.
7. The cost of labor turnover.

In an effort to get some real light on the effect of these influences we have made a careful analysis of our records. What we have found out about one operation—broad-silk weaving—is shown on the charts in Figures 1 and 2.

Figure 1 analyzes the production of 369 broad-silk weavers by length of service, but not by sex. It covers both quantity and quality of output. The top part of the chart at the left shows how closely various length-of-service groups approach the 100 per cent task in quantity, and the one to the right what percentage of perfect quality each group turns out. Thus, the average production of all broad-silk weavers who have been with us less than three years is 50.04 per cent—just a trifle more than half of the 100 per cent task so far as quantity is concerned. The amount of product turned out rises steadily until those of between 10 and 20 years' service produce 66.71 per cent of the task. Then as they grow older the production falls off, but even those old employees who have been at the job

¹ Reprinted, by permission of the author and publishers, from *Factory*, the Magazine of Management, April, 1924.

from 30 to 50 years turn out 54.4 per cent of the task, which is more than the youngsters achieve.

The story of quality is different. Without a falling off worth mentioning, the quality of production increases with experience. The highest quality—74.92 per cent—is reached by those who have been at the loom between 20 and 30 years, but those between 30 and 50 years drop off on the average only 1.7 per cent.

These are group figures and averages. We wanted more details of performance so we developed the middle and bottom sections (Fig. 1) of the chart.

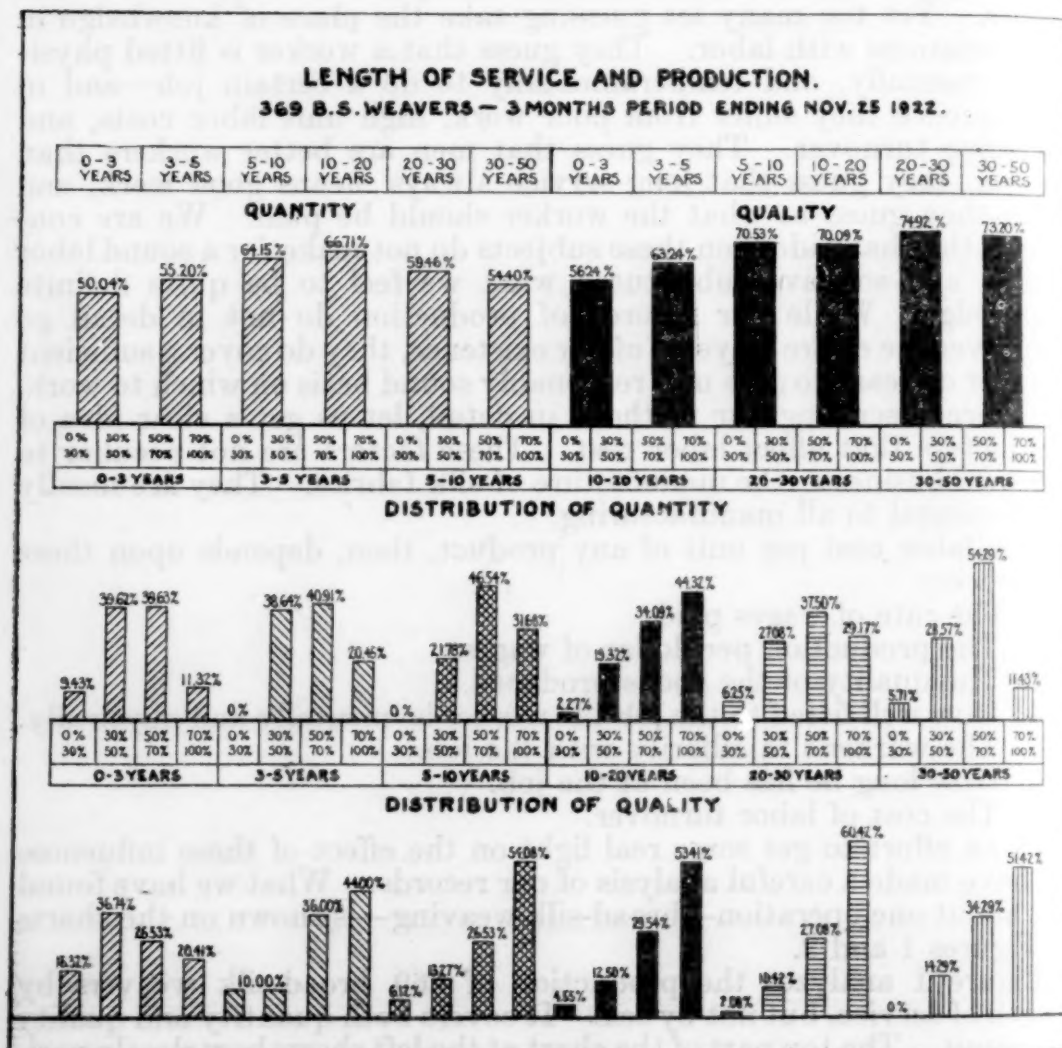


FIG. 1

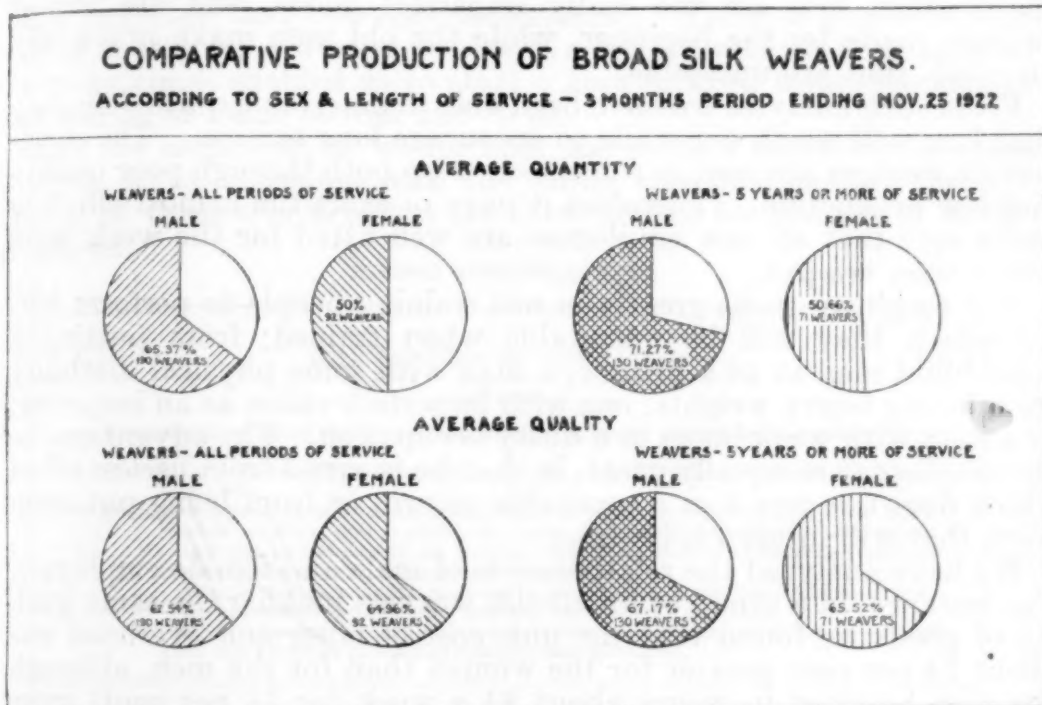
Take first the middle one, which has to do with quantity. At the left is the group which has been weaving less than three years. Of these, only 11.32 per cent produce between 70 and 100 per cent of the task. From 30 to 50 per cent of the task is achieved by 39.62 per cent of all of the workers in the youngest group, and almost exactly the same number (39.63 per cent) reach a production of from 50 to 70 per cent.

Notice that 9.43 per cent of the total turn out less than 30 per cent of the task. From this 9.43 per cent, much of the labor turnover

will come. It is to reduce this percentage that much of our effort is directed.

As the length of service increases, this inefficient group grows smaller. It is not present at all among those who have from 3 to 10 years of service. It then reappears, but in negligible amount, probably due to advancing age.

Age does not cause a general nor marked falling off in production, as the right end of this section of the chart shows. Of those workers who have been at it from 30 to 50 years, 54.29 per cent turn out between 50 and 70 per cent of their task. The best records come in the group of 10 to 20 years' service, of which 44.32 per cent achieve between 70 and 100 per cent production.



COMPARISON OF COST, MALE & FEMALE WEAVERS, BROADGOODSWEAVING DEPT.						
	QUALITY	AVERAGE WEEKLY EARNINGS	IND. LABOR AND OVERHEAD	TOTAL COST	NUMBER OF LOOMS	COST PER YARD
MALE	A	\$32.45	\$33.90	\$66.35	4.18	\$1776
FEMALE	"	28.45	27.79	56.24	3.3	1521
						\$*0145
MALE	B	31.25	31.17	62.42	3.02	1454
FEMALE	"	23.80	27.94	51.74	2.8	1394
						*0140
MALE	C	27.54	37.80	65.34	4.5	1975
FEMALE	"	25.64	37.42	63.26	4.2	2041
						*0066
MALE	D	21.30	42.52	63.82	4.1	1757
FEMALE	"	24.37	23.32	53.69	2.95	1502
						*0145

FIG. 2

Now let us see how length of service affects quality. A little more than 16 per cent of those with less than 3 years' experience are under 30 per cent of the 100 per cent standard. In each higher service group, the percentage of those who fall so far short of perfect grows less until none of the 30-to-50-year group achieve less than 30 per cent of the quality standard. The best performance is shown by those who have been weaving between 20 and 30 years, for 60.42 per cent of this entire group reach from 70 to 100 per cent of perfect quality.

[1935]

For instance, it has been the general opinion that the value of the services of old men decreased with great rapidity after they had reached their prime, and that the period of highest production would be reached in a comparatively short time. I have heard the statement made that the life of a cotton weaver was about 10 to 15 years, that after that he was not worth much—he was about worn out.

The chart shows the extra expense of training weavers to their trade and the long period necessary for them to obtain the maximum production of quantity. The fact is that quality stays on a high level even after the production tends to fall; even the oldest men make more goods than those who have been in training less than two or three years. Not only is this true, but those goods which cause the greatest loss are the badly imperfect goods, and are almost entirely made by the beginner, while the old men make practically no goods that are unsalable.

From such analyses we have been able to determine quite definitely that it is well worth our while to encourage long service. The short-service workers are seen to run the costs up both through poor quality and low production. Therefore it pays to exert the utmost effort to make sure that all new employees are well fitted for the work upon which they are put.

The employer gains greatly in not training people to perform jobs for which they will be unsuitable when trained; from putting a color-blind man in as a printer; a man with some physical disability from lifting heavy weights; one with imperfect vision as an inspector, or a man with weak lungs in a dusty occupation. The advantages to the employee are equally great, in that he is saved from useless effort which does not give him a profitable return, or from being put upon work that will injure his health.

We have analyzed the relative costs of male and female employees. For instance, in a group of broad-silk weavers making the same quality of goods we found that the unit cost of labor and overhead was about $7\frac{1}{2}$ per cent greater for the women than for the men, although the men received in wages about \$4 a week (or 14 per cent) more than the women. The difference in cost was due to the difference in the quantities produced as shown on the chart we have just discussed. For one thing, each man on the average operated 4.18 looms, while the women averaged only 3.3 looms each.

So much for the effect of experience. Figure 2 (p. 3) shows the result of a typical three months' analysis of the relative value of the sexes. At the left is shown the relative quantity and quality regardless of length of service. The men turned out 65.37 per cent and the women 50 per cent of their tasks. In other words, the average male weaver produces 30.74 per cent more than does the average female.

Taking all ages into account the average woman comes 2.42 per cent nearer to perfect quality.

In the section to the right we eliminate the workers of less than 5 years' service. It becomes apparent that men benefit more by experience than do women, for the men now produce 71.27 per cent of their tasks while the women have increased their production only two-thirds of 1 per cent—practically not at all. In quality, too, the men have taken the lead slightly.

These analyses show us the necessity of careful selection. It begins as soon as the prospective employee steps up to the window of the employment office. There, under glass, are photographs of workers at the various jobs we have to offer.

If the job hunter has worked in silk mills similar to ours he is apt to know the name of the job, and so does not need to look over the pictures. But we get many applicants who have worked in other branches of the textile industry and so do not know the technical names of our jobs. Often by looking over the pictures they can pick out an operation similar to the one they have been doing. If we tried to get together by describing the jobs we would each probably be speaking languages that the other did not understand. Pictures provide a language that everyone understands. There is no doubt that making it easy for a worker to choose a job with which he is familiar has many times enabled us to start a man in work where his experience will be of value to him and to us.

After the employee, or we for him, has made a tentative selection of a job, he is compared with the hiring specifications for the job. Typical of these specifications are those shown for the job of mixer, as follows:

HIRING SPECIFICATIONS

DESCRIPTION OF OPERATION

[1]

Mixer

- A. EQUIPMENT.—1 set of platform scales, 1 platform truck, 1 hand truck, containers for silk stock.
- B. MATERIALS.—Bales of silk laps, silk laps and yarn of various kinds of stock and waste silk.
- C. DUTIES.—Orders, receives, and opens bales of silk laps. Mixes silk from bales, records weights, and transfers to boxes, according to written instructions. Delivers mixed silk to set frames. Keeps a record on machine operation cards of the stock running on each machine. Weighs waste from each machine in preparation department and records it. Receives silk from finishing machine and places it in stock. Receives orders from spinning department, and makes deliveries to it of silk yarn and keeps an account of receipts and deliveries.

[2]

CHARACTERISTICS OF OPERATOR

Mixer

- 1. SEX.—Male.
- 2. AGE.—Preferred 20 to 30 years. Acceptable 40 years.
- 3. HEIGHT.—Minimum, 5 feet 6 inches up. Operator has to fill and unload deep containers, mounted on platform trucks.
- 4. WEIGHT.—Medium or above. (See 9.)
- 5. SIGHT.—Good. Operator has to select and issue various kinds of stock for set frames operations. Color sight is necessary in order to properly sort different shades of gray stock.
- 7. HANDS.—Smooth, so that silk fiber will not stick to them.
- 8. FEET.—Good. Standing, stooping, or walking, approximately 80 per cent; sitting, approximately 20 per cent. Distance necessary to travel, 200 to 400 feet.
- 9. STRENGTH.—Considerable. Extreme weight, bales of silk, 450 pounds. Frequency, approximate average, every 1½ hours. Silk laps, 4 to 5½ ounces. Cumulative weight of day's work, approximately 14,000 pounds.
- 10. ACTIVITY.—Considerable. (See Nos. 8 and 9.)
- 13. ENGLISH.—Must read, write, and speak English, in order to be able to keep stock records.
- 14. SCHOOLING.—6 to 8 grades, or common schooling, is sufficient.
- 16. RESPONSIBILITY.—Ordinary. (See 26.)
- 17. RELIABILITY.—Ordinary. (See 28.)

Waste, Hazard, Training

- 26. WASTE.—Small factor. None recorded.
- 27. HAZARD.—Small factor. Strain from heavy lifting.
- 28. TRAINING.—Average training period, 2 weeks; skilled in 3 weeks.
- PROMOTIONS.—None specified.
- KINDRED OPERATIONS.—Stock clerk, moveman.

[937]

These specifications describe the operation in sufficient detail to enable the prospective employee to determine whether he would like the job. They list the equipment with which he will have to work, in this case "a set of platform scales, a platform truck, a hand truck, and containers for silk stock." The materials which he will handle are next listed: "Bales of silk laps, silk laps and yarn, and waste silk."

His duties are described quite thoroughly. "The mixer," he reads, "orders, receives, and opens bales of silk laps. He mixes silk from bales, records weights, and transfers to boxes, according to written instructions. He delivers mixed silk to set frames, and keeps a record on machine operation cards of the stock running on each machine. He weighs waste from each machine in the preparation department and records it. He receives silk from the finishing machine and places it in stock. Receives orders from the spinning department, and makes deliveries to it of silk yarn and keeps an account of receipts and deliveries."

To amplify this description, the prospect is shown three photographs of the various activities. In these he sees the mixer putting stock into the containers, handling the bales, and doing clerical work.

On the hiring specifications (shown on p. 5) are listed and described the conditions surrounding the work, both as a guide to us in selecting the man and so that this applicant can determine whether he has physical or educational shortcomings that would keep him from doing the job in a satisfactory manner.

Thus we see that the mixer must be a man, preferably between the ages of 20 to 30 years, although one as old as 40 is acceptable. He can not be less than 5 feet 6 inches tall, since he has to fill and unload deep containers. His sight must be good and he must not be color blind, since he must be able properly to sort many different shades of stock. Preferably his hands must be smooth so that in handling the various materials the silk fibers will not stick to them.

His feet must be good, for he will be standing, walking, or stooping 80 per cent of the time and traveling from 200 to 400 feet. Considerable strength is necessary, say the specifications, for he must handle 450-pound bales of silk every $1\frac{1}{2}$ hours on the average. In the course of a day he will handle about 14,000 pounds. The job requires considerable activity.

He must be able to read, write, and speak English in order to be able to keep stock records. This calls for common schooling through at least the sixth grade.

Only ordinary responsibility is needed, for waste is a small factor in this operation. There is little danger from accidents; the possibility of strain from heavy lifting being the only hazard.

The average training period needed is two weeks; in three he should be skilled.

These specifications are the basis for the graphic chart which is reproduced on page 7 as Figure 3. This chart is divided into four sections. The first lists the physical characteristics of the worker, the second the mental, the third describes the character of the work and the working conditions, and the fourth gives information on training, earnings, and opportunities for promotion.

[938]

ROOM SYMBOL S2A	HIRING SPECIFICATIONS	OPERATION NUMBER 5704
------------------------	------------------------------	------------------------------

TYPICAL OPERATOR

ESSENTIAL CHARACTERISTICS

PREFERRED CHARACTERISTICS

ACCEPTABLE CHARACTERISTICS

PHYSICAL CHARACTERISTICS OF OPERATOR.

1	2	3	4	5	6	7	8	9	10
SEX	AGE	HEIGHT	WEIGHT	SIGHT	HEARING	HANDS	FEET	STRENGTH	ACTIVITY
a Male b Female	a 20-30 b 30-40	a 5'6" b up	a Med.	a Perfect b Good c Fair	a Good b Poor	a Slender b Coarse c Smooth	a Good b Fair c Poor	a Ordinary b Fair c Considerable	a Ordinary b Fair c Considerable
NATIONALITY II 									

MENTAL CHARACTERISTICS OF OPERATOR.

12	13	14	15	16	17
GENERAL INTELLIGENCE	ENGLISH	SCHOOLING	MENTAL ACTIVITY	RESPONSIBILITY	RELIABILITY
a Good b Fair c Low	a Reads b Writes c Speaks	a High School 1-2 b Grammar 4-5-6-7-8 c Illiterate	a Considerable b Ordinary c Low	a Considerable b Ordinary c Low	a b c

CHARACTER OF WORK & WORKING CONDITIONS

18	19	20	21	22	23	24	25
Day Work	20 Sitting	a Rapid	a Light	a Quiet	a Dry	a Clean	a Hard for Hands
b Pace Work	b Stooping	b Repetitive	b Medium Heavy	b Noisy	b Humid	b Dusty	b Hard for Feet
c Bonus Work	c Standing	c Fine	c Heavy	c Very Noisy	c Wet	c Dirty	c Hard for Back
d Machine	d Walking	d Rough			d Warm	d Artificial Light	d Eye Strain
e Bench	e Reaching				e Hot		e Nervous Strain
f Floor	f Climbing				f Steamy		f Dangerous
g Outside					g Fumes		

OPERATION TRAINING, RATES & EARNINGS

28	29
TRAINING	RATES
a Regular Instruction	a Learner's Rate
b R-3W Average Training Period	b Experienced Rate
c 3W Skilled Operator	

DISTRIBUTION OF HOURLY EARNINGS.											
30	35	40	45	50	55	60	65	70	75	80	85
25	30	35	40	45	50	55	60	65	70	75	80
						1					
AVERAGE HOURLY EARNINGS 571											

Opportunities for Promotion: Timekeeper, Clerk

Kindred Operations: Stock Clerk

Approved _____

Foreman _____ Superintendent _____

FIG. 3

[1939]

How We Fit the Applicant to the Right Job

SINCE these sheets list all characteristics required in an operator and every condition of work that exists in our plants, it is not necessary to print a separate sheet for each job. One type of sheet covers all jobs. It is only necessary to indicate the peculiarities for each job by filling in the squares which apply.

As the color key at the top of the sheet shows, the characteristics of the typical operator are indicated with green crayon, the essential characteristics are checked in red, the preferred in blue, and the acceptable characteristics in orange. [In reproducing this, dots, diagonal lines, etc., have been used instead of the colors.]

These hiring specifications have been most effective in helping us to fit the right man to the job. The graphical analysis speeds up the interview greatly.

Having found a probable match for an operator and a job, we submit the applicant to the usual physical examination by our medical department, which passes upon the physical fitness of the applicant for the job. All applicants for clerical, executive, research, professional, or other positions other than mill occupations are required to take an intelligence test.

Every new employee in the past several years engaged in work other than mill occupation has taken the intelligence test. Although many employers believe that such tests are not trustworthy, our experience has been otherwise. We believe they measure accurately the intelligence of workers, and that experience will bear out the results of the tests. Only a few times have we failed to follow out what they showed and in those cases we were wrong and the tests were right. For instance, a while back one of our factory executives wished to employ a certain young man of his acquaintance to do clerical work for him. The intelligence test showed him to be unfit for clerical work as he was inaccurate, slow, and careless. With definite misgivings, however, our employment department succumbed to the insistence of the executive and let him have the clerk of his choice. About six weeks later he asked that a new clerk be provided as the other had done most unsatisfactorily. The tests had been right.

Keeping Labor Turnover Down to a Minimum

I MIGHT add that the highest grade made so far was achieved by the most important and highly paid executive we have employed since we installed the intelligence tests. We are convinced of its value as an indicator.

This careful selection is followed, as I have said, in order to get workers who are most perfectly fitted to their jobs. The ill-fitted employee is not only costly because he produces less than standard in quantity and quality, but because he is most apt to quit and swell the expensive labor turnover. We have learned a good deal about the causes of labor turnover by analyzing statistics in the two charts shown as Figures 4 and 5 (pp. 10 and 11).

These figures are for the year 1922, when we employed an average of 4,061 workers. During the year a total of 1,219 left, making a turnover rate of 30 per cent.

In the circle at the top left of Figure 4 we have shown what percentage of our employees have been with us for various periods. Practically 70 [63 ?] per cent have been in our employ more than five years.

In the right-hand circle we have shown how much of the total turnover is caused by the various length-of-service groups. Roughly, 77 per cent of the turnover comes from the restless youngsters who have been with us less than five years. Thus, 30 [37 ?] per cent of our employees cause 77 per cent of the labor turnover. Those are rather startling figures that have made us think.

At the bottom of Figure 4 the turnover is analyzed by length-of-service groups. Thus, those who have been with us less than 6 months show a turnover of 120 per cent. Then comes a big jump, for those who have been on the job between 6 months and a year turn over at the rate of 239 per cent. That is, to keep 10 workers in that group we have to employ 24 workers each year.

From there on the decline in the turnover rate is rapid. The older groups show a very low rate—from 7.62 per cent to 15.07 per cent—which is largely accounted for by such natural causes as poor health, advancing age, and death.

We are trying hard, as I have said, to reduce the turnover caused by putting operators on jobs to which they are ill-suited. The lower two circles in Figure 5 show that we are getting somewhere. Note that in 1921, 4.12 per cent of the total exits were caused by unsatisfactory work. In 1922 this reason is assigned for only 0.99 per cent, a reduction of more than 75 per cent.

The upper circles and the rectangles at the bottom left of the chart compare the turnover by sexes. Thus we see that although 37.8 per cent of our employees are females they account for 48.97 per cent of the turnover. Roughly, one male in four leaves each year while almost two out of five females leave.

Perhaps the greatest value of these turnover charts is that they help us find the answer to the questions, "Why are people dissatisfied with their employment?" and, "To what extent can these causes be avoided or eliminated?"

How the "Credit Rating" Plan Aids in Reducing Turnover

SOME of the causes of turnover shown on our charts are common to all businesses; perhaps a few are peculiar to ours.

The fact that women leave after much shorter time than men is generally understood and expected; what effect does this have upon the value of employing women, particularly in those cases where women are exclusively employed upon the job? It does have an important bearing upon the question of the relative efficiency of the sexes and the pay which they might reasonably and economically be paid.

We believe that labor turnover can be reduced not only by fitting the workers to the job, but by making them better workmen and better Americans. We are willing to pay more for long service. To provide an incentive we use what we call a "credit rating" plan to determine the wage rate.

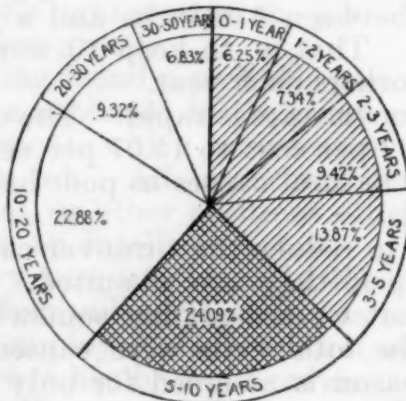
The value of an employee to the company depends upon many things other than the amount of time he gives to his work and the

[941]

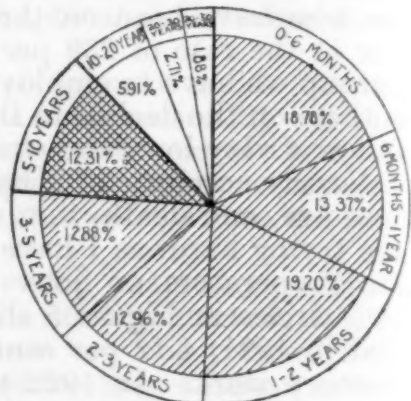
LENGTH OF SERVICE & LABOR TURNOVER

AVERAGE NUMBER OF EMPLOYEES 4,061 NUMBER OF EXITS 1,219 YEARLY TURNOVER 30% YEAR 1922.

DISTRIBUTION OF EMPLOYEES



DISTRIBUTION OF TURNOVER



0-6 MONTHS	6-12 MONTHS	1-2 YEARS	2-3 YEARS	3-5 YEARS	5-10 YEARS	10-20 YEARS	20-30 YEARS	30-50 YEARS
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COMPARATIVE TURNOVER BY LENGTH-OF-SERVICE GROUPS.

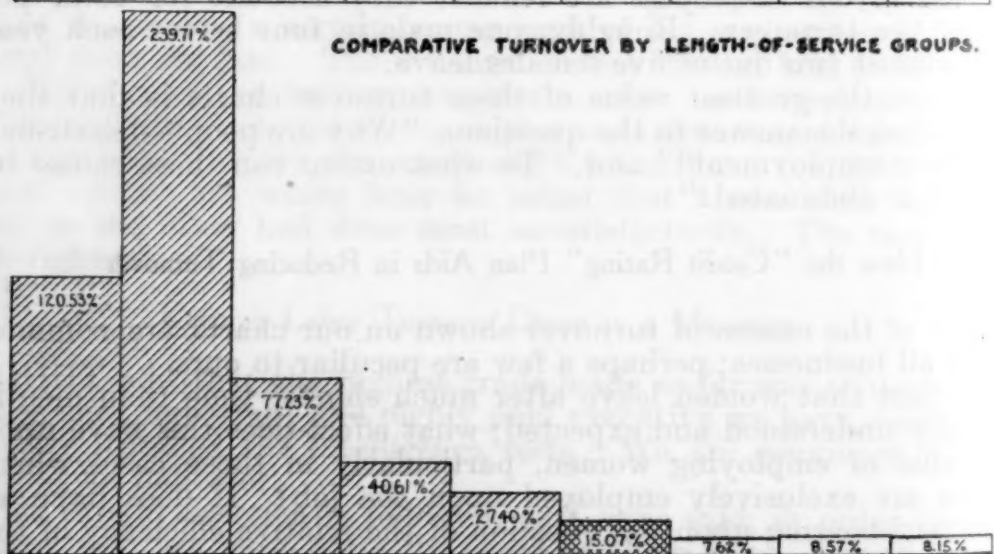


FIG. 4

[1942]

DISTRIBUTION OF LABOR TURNOVER

ACCORDING TO SEX & CAUSES - YEAR 1922 - AVERAGE NUMBER OF EMPLOYEES-4061
NUMBER OF EXITS - 1219 - YEARLY TURNOVER 30%.

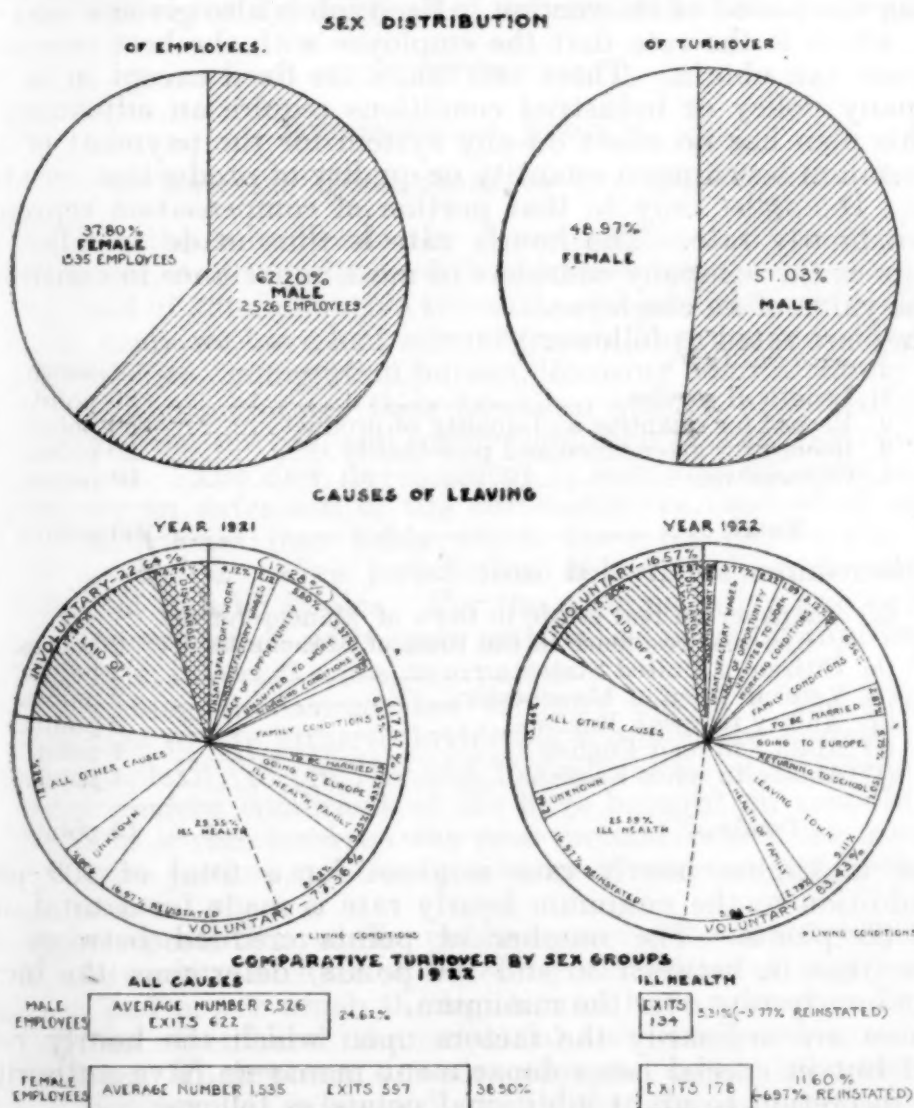


FIG. 5

quantity and quality of his product. His service record, his attitude, and conduct are of great importance and his assistance in securing full use of machinery and plant is essential. The credit rating plan makes it possible for compensation to bear a proper relation to the true value of the service rendered and to base it upon justice and equity. Under it an employee can adjust his own pay by his own efforts within certain limits and in accord with the recognized rates in force for work of his classification.

Each class of job in the mill is given a certain minimum rate, which is the lowest rate for an employee in that class. This minimum rate is not necessarily the starting rate at which he will operate during the period of instruction. Each job is also given a maximum rate, which is the rate that the employee with the best records and attitude can obtain. These two limits are fixed except in so far as company policy or industrial conditions require an adjustment.

This plan has no effect on any system for the payment of bonus or premium based upon quantity or quality of production, or attendance. It applies only to that portion of compensation represented by an hourly rate. The hourly rate is thus made to reflect such factors as the company considers of most importance in contributing to the value of an employee.

They are rated as follows:

	Maximum
1. Length of service.....	20 points.
2. Record for quantity and quality of product.....	50 points.
3. Record for attendance and punctuality.....	20 points.
4. Citizenship.....	10 points.
Total.....	100 points.

Citizenship is subdivided into:

(a) Taxpayer on real estate in town of Manchester or five-year residence in the town of Manchester..	2 points.
(b) Citizen of United States.....	2 points.
(c) Voter in town of Manchester.....	2 points.
(d) Ability to speak English.....	2 points.
(e) Ability to read English.....	1 point.
(f) Ability to write English.....	1 point.
Total.....	10 points.

The maximum hourly rate is given for a total of 100 points. No addition to the minimum hourly rate is made for a total of less than 30 points. The number of points credited between these limits (that is, between 30 and 100 points) determines the increase in the hourly rate over the minimum.

These are ordinarily the factors upon which the hourly rate is based but in special cases department managers have authority at their discretion to grant additional points as follows:

A. Versatility.....	20 points maximum.
i. e., ability and willingness evidenced by actual performance at regular intervals, to do more than one kind of work.	
B. Conduct.....	10 points maximum.
(a) Constant cooperation with the management in the improvement of processes or methods;	
(b) Success in originating or developing new ideas.	

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Deductions of not to exceed 10 points may be made from the total number of points credited, for insubordination, or refusal to cooperate.

We have been using this credit rating plan in some departments for about two years. As rapidly as possible we are extending it to other departments. From present experience we believe it will be effective in reducing the labor cost of our product.

We undertake, of course, many activities for our employees which are included under the general subject of labor relationship. It seems inappropriate to describe them here. The real object of this article is to show how dry statistics can be made to show tendencies and conditions, and to barely touch on some of the more novel ways we have tried to rectify nearly all of the conditions that the statistics show.

Administrative Justice¹

By REGINALD HEBER SMITH, OF THE BOSTON BAR

DURING the last decade the American bar has watched with interest, and sometimes with apprehension, the rapid rise and spread of administrative tribunals and administrative officials. For many years we have had administrative bureaus and officers, as the pension office, immigration bureau, licensing boards, county commissioners—who performed their functions quietly, attracted almost no attention from the bar, and seldom had their proceedings reviewed by the courts. The new development is radically different in that it represents an extension of the administrative method of adjudicating controversies into fields which have for generations been regarded as the exclusive jurisdiction of our traditional common-law system of judicial justice. For the administrative arm to reach out and concern itself with such matters as personal injuries and wage claims is, in a real sense, usurpation.

This trenching on common-law territory has in it the elements of a challenge to the hitherto invincible common-law system. The growing complexity of our law and the difficulties of its administration under modern conditions of life have brought on something in the nature of a race between the new method, which we may call administrative justice, and the time-honored common-law method of securing justice.

In some respects this race for public approval is not altogether fair. Our judicial institutions are shackled by difficulties of organization, procedure, and power which the legislatures have refused to remove, while, on the other hand, the industrial accident commissions have been set free. Their power to make rules and ordain their own procedure is familiar. It is less well known that the industrial accident boards of the United States and Canada have formed an International Association, meeting annually, thereby gaining all the benefits of exchange of opinion and experience and the advantages of concerted action which the courts have never had.² Such handicaps are perhaps offset by the fact that as to many differences between the newer conception and the traditional conception of justice the

¹ Reprinted, by permission of author and publisher, from *Illinois Law Review*, December, 1923, pp 211-224.

² The judicial section of the American Bar Association is an attempt to meet this need.

courts have the last word. This prerogative has already been invoked in many cases involving questions of evidence and the commissions have been confined within straighter limits. Despite legislative declarations that rules of evidence should not be binding the weight of authority imposes on the commissions the necessity of resting their decisions in last analysis on a "residuum of legal evidence," that is, evidence admissible according to the rules of evidence.³

The contest between the two systems of securing justice involves other elements which, to my mind, are more fundamental than this skirmish about rules of evidence and which, so far as I can ascertain, have not been called to the attention of the bar. The purpose of this article is to outline those other elements as they are manifested by (1) industrial accident commissions and (2) those officials who are being given a certain jurisdiction over claims for wages.

Administrative Justice in Industrial Accidents

THE impetus that enacted compensation statutes in 43 States originated in a general conviction, shared by judges themselves,⁴ that the substantive law was unfair to injured workmen. Had the statutes merely substituted for ordinary trial courts administrative courts having substantially identical rules of procedure, the shift of jurisdiction would not have been significant because only the substantive law would really have been changed. What strikes deeper is that our traditional *method* whereby cases are brought into court and adjudicated in court impressed the legislators as so ineffective, so productive of delay and expense, that they frankly tried to supplant it. Court costs and fees paid to court officers were largely abolished. Speed was to be secured by various means, including legislative fiat that there should be speed. There was a notion that lawyers were involved in the delay and expense, and it was hoped that lawyers would no longer be necessary. For the rest, the legislatures had no very definite ideas and so left the commissions to work out their own salvation.

Our experiment in administrative justice might have ended at this point. But the commissions proved resourceful and without much lost motion proceeded to create a remarkably efficient administrative machine. Before long they had from 75 to 95 per cent of all claims automatically adjusting themselves through direct settlements between employee and insurer, every agreement being audited and approved by the commissions acting through examiners.⁵ Through a system of reports, and even by following newspapers,⁶ they endeavored to check every accident and to see that the injured persons were informed of their rights. As to contested claims, the commissions did not sit back and await formal applications for formal hearings. They cast about for ideas, studied the literature of law reform, and quietly appropriated various suggestions. They devised an intermediate proceeding not contemplated by the statutes, which has a double aspect.⁷ Primarily it is a conciliation hearing.

³ For a full discussion and summary of the cases, see Harvard Law Review, January, 1923, p. 263, "Rules of evidence before commissions," by F. A. Ross; and Illinois Law Review, December, 1922, p. 263, "Administrative board evidence rules," by J. H. Wigmore.

⁴ See statement by Chief Justice Winslow of Wisconsin quoted in Journal-American-Bar Association, July, 1922, p. 394.

⁵ U. S. Bureau of Labor Statistics Bul. No. 301, p. 26 (April, 1922).

⁶ Idem, Bul. No. 333, p. 19 (May, 1923).

⁷ Idem, Bul. No. 281, p. 382 (June, 1921).

Many apparent controversies are thus smoothed out and adjusted. If the attempt at adjustment fails, the second aspect of the proceeding comes to light. We now find the commissions carrying through something quite like the English "summons for directions" under which controversies are pared down to clear and simple issues before formal trials commence. At the informal hearings before industrial accident boards disputed matters are reduced to the specific issues actually controverted. It is worth noting in this connection that the summons for directions has repeatedly won the praise of American bar associations, but that the American courts have entirely or almost entirely failed to adopt it.

In formally contested claims the commissions do not rely entirely on such evidence as may be presented by the parties. Often they send out investigators to interview witnesses and ascertain facts. Commonly they have their own physicians upon whom they can rely for accurate testimony as to the extent of disability.⁸ This makes for speed. Most of the commissions keep excellent statistical records of their work, and the California commission is able to report that 86.5 per cent of its contested cases were decided within 62 days.⁹

This brief statement indicates what the plan of administrative justice is in actual practice. Its outstanding feature is the direct affirmative part played by the commission, which, to date, has been remarkably successful. A deadly parallel between the operation of the administrative method and of the judicial method in the field of industrial accidents is fairly forced upon us. For while 43 States have adopted the substantive law of workmen's compensation, 10 or a dozen did not originally adopt the procedural law, but left controversial cases to the regular courts.

The court system of administration has been sharply criticized. The United States Commissioner of Labor Statistics stated:

Ten of our States have placed workmen's compensation laws on their statute books and have thoughtfully left them to be administered by the courts. This is like intrusting the carrying out of the prohibition amendment to the distillers' and brewers' associations. In the first place, a court is a very slow and ineffective administrator. Time is everything in administration, especially in compensation legislation. The courts in the United States, at least, have not yet fully grasped the idea of compensation.¹⁰

The labor commissions of Minnesota, [Alabama], and Louisiana complained of court administration in their States.¹¹ The statistician of the United States Bureau of Labor estimated that under court administration in New Jersey "over 60 per cent of New Jersey's compensable accidents were not reported and presumably were not compensated."¹²

Nor did the matter stop with complaints. What actually happened is not at all reassuring to apologists for common-law methods. In 1921 Arizona took the administration away from the courts and vested it in an administrative tribunal. So did Minnesota. New Jersey at first had no commission, then it created a commission but

⁸ A statute authorizing a court to appoint experts in insanity cases was held unconstitutional in *People v. Dickenson*, 164 Mich. 148 (1910).

⁹ Report of California Industrial Accident Commission, 1917, p. 13.

¹⁰ U. S. Bureau of Labor Statistics Bul. No. 273, p. 23 (August, 1920). See, also, First biennial report of Minnesota Industrial Commission, 1921-22, particularly pp. 133-134, but also pp. 119, 123, 125, 126, 132, and 142.

¹¹ Monthly Labor Review, Nov., 1921, p. 168.

¹² U. S. Bureau of Labor Statistics Bul. No. 275, p. 116 (September, 1920) and Bul. No. 248, p. 59 (March, 1919).

allowed every case to be tried *de novo* in the courts; in 1921 it stopped the trials *de novo* in the courts. Ohio in 1921 reduced the right of appeal from the commission to "jurisdictional" questions so that all cases of continuing disability are exclusively within the province of the commission. No State has ousted or limited the jurisdiction of the commissions in favor of the courts.

So much for celerity and efficiency on the part of courts as compared with administrative tribunals in this particular field. Another necessary and highly important feature of our traditional judicial system is the privately paid lawyer. Prior to the compensation acts lawyers were almost invariably essential to the conduct of personal injury litigation. The exigencies of this situation produced the contingent fee system which has ever since been a thorn in the side of the profession.¹³ Now, even the compensation acts did not automatically make injured workmen richer where liability was contested. So the problem of the paid attorney remained. But the plan for administrative justice frankly intends to minimize the need for lawyers' services. In connection with all the cases that are settled automatically it is true that lawyers' services have been successfully dispensed with. As to disputed claims the commissions have lessened the need for the attorney's work by their own preparation of the evidence through their own investigators. But that is not enough. When there is a genuine controversy the lawyer still has an essential part to play. And so long as the right of appeal to the courts exists on questions of law¹⁴ the attorney will be indispensable if the injured workman is to have a fair hearing.

This truth becomes more evident with the passage of time and the accumulation of precedents. The commissions themselves are keenly aware of it. The chairman of the Illinois Industrial Commission says:¹⁵

If you are going to have an attorney for the employer and make no provision for an attorney for the employee, you are going to have a great many claims that will not be successfully prosecuted.

On this rock the whole administrative plan might have foundered. The first attempt to meet the difficulty was by supervising and curtailing the fees which attorneys might receive.¹⁶ A reasonably thorough study convinces me that there has been more legislation and more drastic legislation concerning attorneys' fees in this one field than in all the rest of the law. Not content with the usual provision making fees subject to the commission's approval, New Mexico, Wyoming, and possibly New York have made it a misdemeanor to receive a fee unless approval has been given.¹⁷ Arizona limits fees to 25 per cent of the award, and violation of this limit is both a misdemeanor and a cause for disbarment.¹⁸ Ohio has a similar limitation, on a sliding scale, and also provides a maximum limit of \$500 for fees.¹⁹

¹³ See the discussion in *Journal of the American Bar Association*, January, 1919, pp. 61-75.

¹⁴ In Ontario, where there is no right of appeal, lawyers are practically excluded. (U. S. Bureau of Labor Statistics Bul. No. 281, p. 427 (June, 1921).) Much the same is true in Nova Scotia. (Idem, Bul. No. 248, p. 85 (March, 1919).)

¹⁵ U. S. Bureau of Labor Statistics Bul. No. 248, p. 83 (March, 1919) and see Bul. No. 281, pp. 376, 383, 429 (June, 1921).

¹⁶ For a recent decision dealing with such a statutory provision see *Gritta's Case*, 241 Mass. 425 (1922).

¹⁷ New Mexico Laws 1917, ch. 83 sec. 22; Wyoming Comp. Stat., 1920, sec. 4340; New York Laws, 1920, ch. 529, and Laws, 1922, ch. 615 sec. 1.

¹⁸ Arizona Acts of 1919, ch. 15. See, also, Porto Rico Laws, 1918, No. 10, sec. 25.

¹⁹ Ohio Laws 1921, pp. 291, 298.

Unquestionably wrongdoing by individual lawyers has fully merited severe punishment. But when a legislature blankets a whole situation with such rules it automatically cuts injured operatives off from the possibility of getting proper lawyers' service. It is never a wise, permanent solution of this sort of problem to unburden clients by trying to place the burden on the bar. Here again the commissions, through intimate knowledge of their own proceedings, are perfectly aware of the danger. The chairman of the Pennsylvania Workmen's Compensation Board stated the problem explicitly:

Now, what are we going to do with the lawyers? You can't keep them out. The employers, the insurance companies, the self-insurers, will employ the best attorneys. If you make it absolutely impossible for the claimants to offer such rewards to attorneys that they can not get legal talent to combat the legal talent on the other side, then you are going to affect very seriously the claimants' rights. And if your boards take up the side of the workmen and prepare the workmen's cases and let the workman present the case, through his own lips, that you prepared for him, and you decide your cases, you are soon going to cripple your own usefulness through lack of confidence by the community. Therefore you must accord the claimant some intelligent representation.²⁰

This situation has only recently revealed its potential danger but already we can note the steps being taken to meet it. A very significant proposal for the consideration of the bar is that administrative justice shall include the attorney's function within its scope. Here is involved a real departure from our traditional conception. We are dealing with such recent developments that we fix only the general trend, but putting together scattering bits of evidence affords a rather instructive picture.

The need somehow to supply the attorneys' services or to afford something in lieu thereof was naturally first felt in States having their compensation acts under court administration. Thus in Minnesota injured persons turned to the department of labor and industries for legal advice and assistance.²¹ In 1915 the legislature conferred authority on this department and its agents saying they "shall advise * * * parties of their rights * * * shall assist * * * in adjusting differences, * * * and are hereby empowered to appear in person before the court in any proceeding under part 2 of this act as the representative or adviser of any such party. * * *"²² Wyoming²³ has instructed its county attorneys to give legal advice to injured workmen. Nebraska provides that attorneys' fees may be taxed as costs.²⁴ On the other side of the fence, an Oregon statute provides that if an employee sues in tort against an employer insured under the compensation act, the attorney general shall defend the employer and the expense shall be borne by the State accident fund.²⁵

The last step has been taken in Pennsylvania, where the industrial accident board included in its budget and received from the State \$12,000 for the express purpose of retaining lawyers. The chairman says:

²⁰ U. S. Bureau of Labor Statistics Bul. No. 281, p. 429 (June, 1921).

²¹ U. S. Bureau of Labor Statistics, Bul. No. 304, p. 110 (August, 1922).

²² Laws 1915, ch. 209, sec. 12; Minnesota Gen. Stats. Supp. 1917, sec. 8219.

²³ Acts of 1921, ch. 138, sec. 8 (amendment to Comp. Stats. 1920, sec. 4340). See, also, Arizona Sess. Laws, 1921, ch. 103, secs. 21, 84.

²⁴ Nebraska Laws 1919, ch. 91, sec. 4, p. 234; Nebraska Comp. Stats. 1922, sec. 3048. This section is very obscurely worded.

²⁵ Oregon Acts of 1921, ch. 401.

In Pennsylvania we have tried to solve that by letting the State give us an appropriation for attorneys' fees for just that purpose, and I believe that Doctor Connelley asked and received last year \$12,000. Of course, that's just a beginning. Therefore, in Philadelphia and Pittsburgh and Scranton, the center of the hard-coal industry, we have attorneys. We also have our complaint clerks in headquarters. The first man an injured workman or the widow of a decedent meets on entering our office door is the man to whom he or she can make complaint; he presents the case and it is immediately turned over to an attorney who specializes in this law, and that attorney represents these claimants without any charge whatsoever. That is the way we have found the best in the great industrial State of Pennsylvania with the great volume of business we have to handle.²⁶

By this provision an industrial accident commission rounds out and completes its equipment for administering justice. Where under our traditional system the facts are secured by an investigator paid by the litigant, the medical evidence is offered by a physician paid by the litigant, and the case is conducted by a lawyer paid by the litigant, under the plan of administrative justice, as illustrated by an industrial accident commission, the facts are secured by an investigator paid by the commission, the medical evidence is afforded by a physician paid by the commission, and the case is, when necessary, conducted by a lawyer paid by the commission.

Administrative Justice in Collection of Wages

LET us now turn to a different field of administrative activity and consider what has been done to help workmen collect wages from their employers. Here we must take the obvious and sound distinction between administrative tribunals and mere administrative officials. The latter normally have no power to adjudicate disputes. Their function is to supervise, to give advice, and perhaps to aid individuals much as private lawyers would aid them. But the common-law courts remain as the ultimate law-enforcing authority. It is always possible, however, that the original statute creating any administrative office may prove the seed from which will spring a new administrative tribunal equipped as fully as the industrial accident commissions which we have just considered.

I do not believe that the bar in general realizes how much history has been and is being made in the field of wage collection. Here there has long been the same deep-seated dissatisfaction with the substantive law, resulting in legislation changing the basis of the law, as, for example, by making nonpayment of wages a criminal instead of a civil matter. There has been the same difficulty concerning the necessity for lawyers' services, and various attempts have been made to abolish, to limit, or to supply such services. Finally, there are, in some quarters at least, the same feeling that the standard method of court procedure is too slow and too expensive, and there is a desire to supplant it by administrative methods.

This story begins in Massachusetts in 1879, when the "freedom of contract" idea was departed from and legislation required weekly payment of wages. In 1886 corporations engaged in certain industries were by statute made liable to criminal proceedings and to fines for nonpayment of wages.²⁷ In 1895 this was extended to individual employers.²⁸ Year by year the law has been extended

²⁶ U. S. Bureau of Labor Statistics, Bull. No. 281, p. 429 (June, 1921).

²⁷ Stats. 1886, ch. 87.

²⁸ Stats. 1895, ch. 438; Opinion of the Justices, 163 Mass. 589 (1895).

until to-day it embraces employers in all important lines of business. The law provides "every person, * * * shall pay weekly each employee * * * the wages earned by him to within six days of the date of said payment; but any employee leaving his employment shall be paid in full on the following regular pay day; and any employee discharged shall be paid in full on the day of his discharge. * * * Whoever violates this section shall be punished by a fine of not less than 10 nor more than 50 dollars."²⁹

Legislation affecting payment of wages has been passed in most jurisdictions.³⁰ Many States could not go as far as Massachusetts because of constitutional provisions prohibiting imprisonment for debt—surely a curious twisting of such provisions. As a result various devices have been employed to overcome or counteract those features of our customary court procedure that seemed to the legislators to be unfair to unpaid workmen, as the delay, the expense, and specifically the problem of securing the services of an attorney.

One group of States has endeavored to compel payment of wages by imposing a penalty for nonpayment, leaving, however, the unpaid wage earner to collect the penalty himself through an ordinary suit in the ordinary civil courts. Thus in Kansas the wages run until paid;³¹ in Louisiana³² and Arkansas³³ they run until paid or tendered. In California,³⁴ Idaho,³⁵ and South Carolina³⁶ wages for a period not exceeding 30 days are added to the unpaid wages. In Montana the penalty is 5 per cent of the wages due.³⁷ The imposition of 10 per cent "liquidated damages" for each day's delay in Michigan on some employers only was held class legislation of the most objectionable kind.³⁸ A recent Indiana case contains an interesting review of a series of such statutes commencing in 1885 and running along to 1915. The eight or nine statutes thus discussed ring most of the changes on this theme. Some were sustained, others were held unconstitutional.³⁹

The doubtful constitutionality of such provisions seriously detracts from their usefulness. More than that, they do not get at the root of the trouble. The unpaid wage earner must have a lawyer before he can start suit. To get a lawyer he must produce ready cash or sign a contingent fee agreement which is likely to be reprehensible. But he rarely has money on hand. A penalty such as those described above, which will not increase his resources unless or until he wins, helps him little more than a life preserver floating 100 yards away would help a drowning man. Montana had a 5 per cent penalty, but the Montana Department of Labor and Industry says:⁴⁰

²⁹ Gen. Laws, 1921, c. 149, sec. 148; amended by Acts of 1921, ch. 51.

³⁰ These laws are collected in U. S. Bureau of Labor Bul. No. 229 (Dec. 1917) and Bul. No. 277, p. 404 (1921).

³¹ Acts of 1919, ch. 221, amending Kansas Gen. Stats. 1915, sec. 5875. Compare *Anderson v. The United States Oil Co.* 106 Kans. 483 (1920).

³² Acts of 1920, ch. 150, sec. 2.

³³ Crawford and Moses Digest Stats. 1921, sec. 7125. This applies only to railroads and corporations and it contains certain time limits.

³⁴ See *More v. Indian Spring Co.*, 37 Cal. App. 370 (1918), 174 Pac. 378.

³⁵ 2 Comp. Stats. 1919, sec. 7381. A good case is *Olsen v. Idora Hill Mining Co.*, 28 Idaho, 504 (1916). On writ of error this case was carried to the United States Supreme Court, which dismissed the writ apparently for failure to print the record; 245 U. S. 640 (1918). A later case is *Marrs v. Idaho Short Line Co.*, 33 Idaho, 785 (1920).

³⁶ Acts of 1919, No. 20, amending 1 Code of Laws, 1921, sec. 3812. See *Wynne v. Seaboard Airline Ry.*, 96 S. C. 1 (1913); annotated in 40 Am. & Eng. Ann. Cas. 133.

³⁷ Mont. Rev. Codes, 1921, secs. 3085, 3086.

³⁸ See Mich. Comp. Laws, 1915, sec. 5585; *Davidow v. Wadsworth Mfg. Co.*, 211 Mich. 90, 178 N. W. 776, (1920); this case is thoroughly annotated in 12 A. L. R. 605, 612-640.

³⁹ *State v. Martin (Ind.)*, 1923, 139 N. E. 282.

⁴⁰ Fourth Biennial report, 1919-1920, p. 6.

The difficulty so often experienced by the common laborer and the farm hand in the matter of collecting wages is again brought to the attention of the next legislative assembly. It seems almost incredible that past legislatures, although repeatedly urged to do so, have failed to provide some simple and inexpensive method of collecting wages of employees, other than the present prolonged, technical, and costly process of bringing suit in the civil courts.

The process is costly mainly because of the expense of having a lawyer. Recognizing this, another group of States have endeavored to provide that if the laborer won his lawyer's fee should be paid by the defendant. Thus Minnesota allows the successful plaintiff in a wage case an extra \$5,⁴¹ Montana allows a reasonable attorney's fee to be taxed as costs,⁴² Idaho the same.⁴³ In Oregon, if an employee is discharged without having willfully violated his contract of employment, or if he left voluntarily after giving three days' notice of his intention to quit and is not paid within 48 hours after proper demand, then in a suit to enforce payment the court must assess an attorney's fee as costs against the defendant.⁴⁴

Some cases have held that statutes allowing the attorney's fee to the plaintiff but not to the defendant are unconstitutional. The argument is that it is wrong to help one side unless a reciprocal and similar advantage is held out to the other side. The United States Supreme Court, however, did not adopt this view, pointing out that the duties of a plaintiff are more burdensome than those of a defendant.⁴⁵ Of course, State courts, construing provisions of State constitutions, would not necessarily be bound by these Federal cases which proceed under the terms of the fourteenth amendment. But here again, even if we assume the constitutionality of our statutes, we find that the fundamental difficulty has not been wiped out. The plan of inducing attorneys to act in hopes of a counsel fee for success savors too much of the contingent system. Also, we repeat the mistake of dropping the life preserver into the ocean 100 yards from the drowning man.

Accordingly we find more and more States invoking the administrative method, by creating an administrative official, generally called a labor commissioner, and placing in his hands the responsibility of enforcing the wage-payment laws. This has been done in California,⁴⁶ Nevada,⁴⁷ Utah,⁴⁸ Wyoming,⁴⁹ Massachusetts,⁵⁰ and Washington.⁵¹

These administrative officials have not been given any legal jurisdiction to hear and determine cases, as have the industrial accident boards, but in California⁵² and Washington⁵³ the officials may arbitrate seasonal labor wage claims, and all of the officials have acquired a sort of de facto jurisdiction and conduct hearings which are partly in the nature of arbitration and partly in the nature of

⁴¹ Laws 1919, ch. 175, sec. 5; there is also a provision for double costs.

⁴² Mont. Rev. Codes, 1921, sec. 3089. The attorney's fee is here allowed to the "successful party." That wording avoids a possible constitutional objection.

⁴³ Comp. Stats. 1919, sec. 7380.

⁴⁴ Acts of 1919, ch. 54; Olsen's Oregon Laws (1920), sec. 6799.

⁴⁵ Missouri, Kansas & Texas Ry. Co. v. Cade 233 U. S. 642 (1914); also Missouri, Kansas & Texas Ry. Co. v. Harris, 234 U. S. 412 (1914). Compare St. Louis, Iron Mountain & St. Paul Ry. Co. v. People, 173 U. S. 404 (1899).

⁴⁶ Deering's California Gen. Laws 1917-1919, act 2142 b, sec. 7.

⁴⁷ Acts 1919 c. 71 sec. 7; Nevada Rev. Laws 1919, p. 2777; Stats. 1920-1921, ch. 138.

⁴⁸ Acts of 1919, ch. 71 sec. 9.

⁴⁹ Wyoming Comp. Stats. 1920, sec. 264.

⁵⁰ See Gen. Laws, 1921, ch. 149 et seq.

⁵¹ Acts of 1919, ch. 191; Remington's Comp. Stats. 1922, secs. 7587, 10838, 10839.

⁵² Deering's California Gen. Laws, 1915, act 2143 a, secs. 3-6.

⁵³ Remington's Comp. Stats. 1922, secs. 7606 et seq.

conciliation. Under this de facto jurisdiction the administrative officials have accomplished results. In California from 1912 to 1920 64,228 claims were filed, and 38,716 claims, amounting to \$1,185,602, were collected.⁵⁴

But this plan has obvious limitations. The labor commissioner can not enforce his decision against an employer who refuses to pay; he must in last analysis bring proceedings in court. Here the lawyer difficulty crops up again. The California commissioner and his representatives are authorized⁵⁵ "to take assignments of wage claims and prosecute actions for * * * persons who are financially unable to employ counsel," but if the representatives are laymen they are not much better equipped to conduct common-law litigation than is the unpaid wage-earner himself. The public defender in Los Angeles has said that as the labor commissioner "is not provided with attorneys" he can not in fact sue in court and therefore refers such cases to the civil department of the public defender's office.⁵⁶

We have already seen that the Pennsylvania Workmen's Compensation Board overcame this difficulty by directly adding lawyers to its staff, thereby including the attorney's functions among its administrative functions. In Massachusetts the labor commissioner has added an attorney to his staff, so that the administrative service in wage claims includes legal services in preparing and prosecuting complaints.⁵⁷

This administrative plan, thus carried to its logical completion, has undeniably been successful. The law and the administrative power back of it are so well known that it is almost self-enforcing. The best evidence obtainable⁵⁸ indicates that wages are paid in Massachusetts more promptly and with less necessity for litigation than elsewhere.

Nevada affords an illustration of how rapidly this administrative service tends to grow. In 1915 the legislature created the office of labor commissioner with jurisdiction over the laws affecting safety, hours, and employment of minors. By successive amendments in 1917, in 1919, and in 1921 this jurisdiction was enlarged until we find included⁵⁹ "*Said commissioner shall have power to prosecute actions for the collection of wages and other demands of persons who are financially unable to employ counsel * * * and whenever he shall be satisfied that persons financially unable to employ a counsel have valid and enforceable claims for wages or other demands he shall present the fact to the district attorney, and it shall be the duty of such district attorney to prosecute the same.*"

Conclusion

[I]t is premature to try to prophesy the outcome of this clash between our traditional system of justice and the new conception of administrative justice, because the impetus behind the latter has by

⁵⁴ Biennial report of Bureau of Labor, 1919-1920, p. 11.

⁵⁵ Deering's California Codes and Gen. Laws 1917-1919, act 1828, sec 7. Note the consolidation of industrial and labor commissions by Statutes of California, 1921, ch. 604, pp. 1031 et seq.

⁵⁶ Eighth report Porto Rico Bureau of Labor (1921) summarized in U. S. Bureau of Labor Statistics. MONTHLY LABOR REVIEW, January, 1922, p. 232.

⁵⁷ See Seventh annual report of the Massachusetts State Bureau of Labor and Industries, Pub. Doc. 104 (1920), p. 9.

⁵⁸ See figures submitted in "Justice and the Poor," by Reginald Heber Smith, p. 97.

⁵⁹ Quoted from Nevada Stat. 1921, ch. 138; italics the author's.

no means subsided. The plan of administrative justice still basks in popular favor and is unscathed by the recurrent attacks on our judicial institutions.

The danger is that the advantageous features of the administrative plan earlier described will so impress the people generally that their legislators may go further and tamper with our fundamental conception that justice is best secured when administered according to law by trained judges. As Dean Pound has said in a note on the rapid growth of extralegal arbitration tribunals:⁶⁰

Without prejudice to the movement to encourage arbitration, may I suggest that we ought to consider its implications in connection with the movement for transfer of jurisdiction to administrative commissions, largely manned by laymen, which has been going on throughout the United States for a long time. Do not such movements testify not merely to the inadequacy of our judicial organization and especially of the organization of the administrative side of judicial justice, to the demands of to-day, but also to a certain lack of constructive ability on the part of the legal profession? If the tendency to remove matters heretofore intrusted to the courts from judicial cognizance and intrust them to lay decision goes much further it will be difficult presently to maintain our traditional ideal of justice according to law. The habitual inertia of the legal profession, if persisted in, will put us at the mercy of the well-meant but misdirected activities of impatient laymen.

What appeals to laymen is that under the administrative plan you do in fact get a hearing quickly and cheaply. If you need help—and a large proportion of litigants do need help of one sort or another—you get it. This comports with the average man's notion of what justice should be.

These advantages, now possessed by the administrative plan of justice, are not inherent; they result from sound ideas worked out or adopted by wise commissioners, and parallel improvements can just as readily be effected in the courts. Speed can be secured not only through modernizing procedure in general but through specific agencies such as the small claims courts and the domestic relations courts. The hardship worked by court costs and fees in certain cases can be eliminated through a proper *in forma pauperis* procedure. Where the problem is the expense of securing an attorney the legal aid organizations afford a solution that experience demonstrates can be made a complete solution. Our judicial institutions, thus adapted and supplemented, could render the type of service that a complex, urban, industrial society demands.

Along these very lines more than a score of bar associations are already actively at work. The general awakening of the bar to a keener realization of its responsibility for our administration of justice, of which such work is but one manifestation, makes it not unlikely that in the final outcome the influence of the organized bar may prove to be the decisive factor.

⁶⁰ Massachusetts Law Quarterly, February, 1923, p. 61.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

The Alien: A Psychoeconomic Problem of Turnover

AN ARTICLE by Marian K. Clark, formerly director of the division of aliens in the New York State Department of Labor, dealing with the industrial problems presented through the failure to Americanize or at least to give a working knowledge of our language to foreign-born workers in this country, is published in the *Nation's Health*, February, 1924 (pp. 83-85, 134, 135).

In spite of the enormous amounts spent in so-called welfare work and safety engineering it is generally conceded, the writer says, that the non-English speaking foreigner presents the greatest accident hazard and the greatest turnover liability with which the industries of the country have to deal.

The problem presents two aspects—the human problem and the language problem. In the former case welfare work which does not reach the mind of the alien—that is, does not provide for adjustment of those workers who are ignorant of our language, customs, laws, and ideals, and who are often badly placed as to both working and living conditions—will fail to correct the maladjustments that lead to industrial accidents, discontent, turnover, restlessness, dissatisfaction, and segregation.

Various industrial studies by Federal and State agencies have established the status of the foreigner as a high accident hazard and a high turnover factor in industry. A definite relationship has been shown, in the case of applicants for workmen's compensation, between alien illiteracy and industrial accidents. Seventy per cent of all applicants for compensation in the New York office of the Bureau of Workmen's Compensation present their claims through an interpreter, showing that the non-English-speaking alien is an enormous economic drain on industry. If this loss is due, as investigations tend to prove, to ignorance of the language, then "the removal of its cause should engage the undivided attention of the industrial management of our time. 'English for safety' should be adopted as an industrial slogan."

It is said that there is no "real way of getting hold" of the non-English-speaking foreigner so long as he remains a non-English speaker, and that the numerous causes which contribute to his maladjustment can be corrected only by establishing a means of communication between the alien as an individual and the authorities with whom he is associated. The existing methods of welfare work have proved to be so inadequate that "the necessity for the introduction of entirely new methods in this field of endeavor must be conceded."

It would therefore appear that the introduction into American industry of a system of industrial English of the same order as the lingua-franca of the ports of China and the Far East, based upon a vocabulary common to the industry in which it is employed, would be an economic consideration not to be confounded with philanthropy, and not to be disregarded as a sound business investment by any thoughtful employer.

A different and distinct problem is presented by each industry as to the vocabulary which will solve its industrial problems through

language instruction. The use of foreign language signs and instructions can serve only as temporary makeshifts at best and instruction which will furnish a vocabulary of idioms and words in common use in the industry in which they work would mean educating these workers only to the point where they can understand orders or commands. It is not considered by the writer to be the function of the employer to Americanize the worker or to furnish education in any but an industrial sense. Further education of aliens admitted to this country is the function of the State, the church, and the communities in which they live, so that the introduction into industry of a system of instruction in industrial English should not be considered by employers as an educational but as a commercial activity. Recent research regarding fatigue in industry has shown that change of position, change of activity, and change of thought, rather than actual rest, are essential in combating fatigue. Because of this fact, therefore, the time required for language instruction could be made a means of stimulating output instead of reducing it.

It is further considered that one language in industry would make for stability, reducing the excessive cost of turnover, would increase efficiency and decrease those industrial accidents which result from the inability of the worker to understand commands. Out of a total of 2,300,000 employed in the 72,000 factories in the State of New York there are approximately 1,500,000 foreign-born workers. Of this number, 400,000 can not read or write even in their own language and 700,000 can not understand or speak English, a condition constituting a definite barrier to industrial progress.

The amount of time required to give the able illiterate all the reading, writing, and speaking vocabulary needful for his industrial life is said to be about 60 hours. This system of teaching industrial English, including only that which will be serviceable in the industrial life of the worker, can be furnished for a minimum of 400 workers, it is estimated, at a cost not exceeding 20 cents per man per hour.

The present restrictive policy of immigration makes it the more imperative to develop the present foreign-born population into an efficient, competent, and stable industrial force. The welfare of both the State and the employer depends to a large degree upon the welfare and development of the industrial worker.

If our national language is to remain the English language, then let there be compulsory requirements for every immigrant to learn the industrial language of his selection within a given stipulated period after his admission to the country, and one of the most valuable contributions to posterity that can be bestowed upon this Nation will be the elimination by industry of the non-English speaker in the industrial life of the United States.

Labor Conditions in Hawaii

ACCORDING to the report of the Governor of Hawaii for the year ending June 30, 1923, as a result of the acute labor shortage in 1921 in that Territory, increased immigration of field laborers was secured from the Philippines, and in 1923, for the first time in a score of years, the Japanese held second place as to the number employed in the sugar industry. The Filipino laborers have proved themselves efficient workers, and as a rule are frugal and desirous of making enough money to go back to their native islands and establish their own homesteads.

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The wages, housing conditions, and general welfare of the agricultural workers in the chief industries of the Territory are reported as equal to "the best found in any agricultural section of the United States * * * and there is no sugar-cane growing section of the world that offers happier surroundings for the workingman."

The following table shows the composition of the labor forces on 42 plantations:

EMPLOYEES ON PAY ROLLS OF 42 PLANTATIONS OF THE HAWAIIAN SUGAR PLANTERS' ASSOCIATION, MAY, 1923, BY SEX AND NATIONALITY

Sex and nationality	Number of employees		Total
	On monthly basis	Not on monthly basis	
Men:			
Americans.....	1,066	113	1,179
Japanese.....	397	13,143	13,540
Filipinos.....	63	20,821	20,884
Chinese.....	58	1,459	1,517
Koreans.....	14	1,018	1,032
Porto Ricans.....	11	1,147	1,158
Portuguese.....	416	1,552	1,968
Spanish.....	5	102	107
Hawaiians.....	131	551	682
All others.....	139	89	228
Total.....	2,300	39,995	42,295
Women:			
Japanese.....	57	2,770	2,827
All others.....	49	359	408
Total.....	106	3,129	3,235
Minors:			
Regular, male.....		575	575
Regular, female.....		69	69
School.....		474	474
Total.....		1,118	1,118
Grand total.....	2,406	44,242	46,648

Much land previously used for pasture is now given over to pineapple cultivation, and many Japanese have deserted the sugar-cane fields for this easier form of agricultural labor.

In the governor's opinion "there would seem to be no serious objection to legislation that will place in the hands of the President of the United States the authority to allow the Territory of Hawaii to secure the immigration of families from the agricultural districts of European countries when recommended by the Secretary of Labor, after becoming satisfied that a serious labor crisis exists in the Territory." The governor adds, however, that legislation of this character should include a provision that immigrants thus brought in should not be permitted to go from the Territory to take up residence on the mainland of the United States until they become American citizens. It may be remembered that the Federal commission appointed in 1922 to make a survey of labor conditions in Hawaii presented to Congress the Territory's appeal for legislation allowing agricultural workers "to enter Hawaii under special conditions to meet an emergency." The requested law has not yet been enacted.

Attention is called to the national importance of the Territory's having a citizen population of undeniable loyalty.

The placing of more citizens on the land has been a persistent problem in Hawaii. Homestead plans have met "with varying success." The necessity for the conservation of agricultural lands is beginning to be realized, and earnest efforts are being made to impress upon the children in the public schools the dignity of agricultural labor and the opportunities in agricultural undertakings. As a result of the work

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of the Hawaiian Homes Commission there are now 20 families homesteading on 20-acre farms on the island of Molokai. These homesteaders are finding a market for their diversified products, and there is every prospect that the colony will be extended until the 3,000 to 4,000 available acres on Molokai are under cultivation by successful farmers.

Wages and Industrial Conditions in the Lumber Industry of Texas

THE Bureau of Labor Statistics of Texas completed in March, 1924, an investigation of the lumber industry of that State. The following is an abstract of a mimeographed report embodying the findings of this survey.

Wages and Hours of Labor

SAWMILLS.—Representatives of the bureau visited 92 sawmills, 5 of which were shut down for various causes. The 87 mills operating in January, 1924, employed 14,128 persons. The average daily wage of all employees in these mills was \$3.16. In January of the preceding year the number of employees was 14,145 and the average daily wage \$2.99.

The survey showed that the average annual earnings of skilled mechanical employees for 1923 was \$1,256.31 and of unskilled employees \$624.33. The 10-hour day is universal in the industry.

Retail lumber yards.—Reports were obtained from 234 retail lumber yards located in widely separated sections of the State. The average hours of labor, wages, and earnings of employees in these yards are shown in the following table:

AVERAGE DAILY HOURS, AVERAGE SALARY OR WAGE, AND AVERAGE ANNUAL EARNINGS OF EMPLOYEES IN RETAIL LUMBER YARDS IN TEXAS

Class of employees	Average hours worked per day	Average salary or wage		Average annual earnings, 1923
		January, 1923	January, 1924	
Office employees.....	10	Per month \$156.88	Per month \$161.85	\$1,863.69
Skilled mechanics.....	8½	Per day 5.56	Per day 5.62	1,430.20
Unskilled workers.....	9½	3.13	3.15	936.30

Living Conditions in Sawmill Districts

IT is usual for the lumber companies to furnish their employees with living quarters, the companies ordinarily owning all the real estate in the neighborhood of the mills. The rent of these accommodations ranges from \$2.50 to \$15 a month, the average for all the reporting companies being \$6.09.

The greater number of the companies have commissaries where the workers make their purchases with store checks which their employers issue. The commissaries charge about the same as the retail stores near the mills. The majority of the companies also maintain medical and hospital service for their employees and their families, deductions being made from the employees' wages to meet the expense of this service. The average assessment for this purpose is \$1.50 a month for employees who have families and \$1 a month for single employees.

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A feature of the investigation was the visitation of the employees' homes to gather statistical data on the social, educational, and general living conditions of these workers.

Representatives of the bureau called at 228 homes in the milling districts. In this number of homes there were only 24 families that reported any savings after annual living costs had been met. Such savings included payments on investments or for homes and deposits in the bank. The average savings, according to the reports from the 24 families, was \$271.12. Only 5 families stated that they completely owned their homes.

With certain notable exceptions the homes or living quarters which the mills furnish their employees were found inadequate for the requirements of a normal family. Generally the sanitation was very poor. The houses were built close together, with little space for yard or garden.

The public schools located near the mills offer the only educational opportunities. Although the teachers and school authorities are endeavoring to cope with the problems arising from local conditions, the average attendance is poor and "many children of school age are out of school altogether." Recreational facilities are lacking and there are few available libraries.

Retail Prices and Profits

ACCORDING to the survey the average price for all grades of lumber at the mills is \$33.79 per 1,000 feet and the production cost is \$28.63, which indicates a profit of about 18 per cent for the mills, the purchase of material, wages, overhead charges, depreciation of equipment, etc., being included in the cost of production. The delivery price to the retail yards is ascertained by adding the freight charge to the various parts of the country to \$33.79—the average price of 1,000 feet of lumber at the mills. The statement following shows the average cost per 1,000 feet of lumber to the retail yards and the average selling price of the same amount of lumber at the yards in different localities.

COST, SELLING PRICE, AND PROFITS OF RETAIL YARDS PER 1,000 FEET OF LUMBER, BY LOCALITIES

Locality	Average cost, including freight	Average selling price	Per cent of profit ¹
North central Texas zone.....	\$40.99	\$54.91	34.0
South central Texas zone.....	41.53	55.25	33.0
West Texas and Panhandle zone.....	42.63	61.58	44.4
Southwest and Rio Grande Valley zone.....	42.76	65.61	53.4
East and southeast Texas.....	38.14	47.07	23.4

¹ Overhead expenses not deducted.

The above quotations are for cash payments, a higher price being charged "when lumber is sold on terms, or discounts made on lumber in large quantities." Whereas the profits of the retailers are shown to be very much higher than the profits of the mills except in east and southeast Texas, the territory closest to the mills, no expenses of operation were deducted for the retail lumber yards, as it was not possible to get an accurate estimate of all such expenses. Attention is called to the fact that wages are generally higher at the yards than in the mills.

Constitution and Operation of British Trade Boards in 1922.

THE British Ministry of Labor has recently issued a report on the administration of the trade boards' acts, covering the period from January 1, 1922, to March 31, 1923, which contains some data as to the composition of the various boards. The number of trades under the act during this period was 37, and the number of trade boards 44. This does not include the Irish trade boards, which passed at the beginning of 1922 under the control of the Irish Government.

For the most part, the trades in which the boards have been set up are unorganized, and where organized workers are concerned they are mainly in large general labor unions, which bring together a number of different trades. This condition makes it difficult to secure proper representatives of the workers for trade-board membership. It is desirable that representatives should have a personal knowledge of the trade concerned, and at the same time should be able to present the case of the workers effectively. Trade-union officials are favorite representatives, but in the unorganized trades and in those which are organized into general unions, the official chosen may never have had any experience in the particular trade which he is representing. The Cave committee had suggested that at least three-quarters of the representative members of a trade board should be persons "who were or had been engaged in the particular trade concerned," but the unions protested against any limitation upon free choice, and as yet no restrictions have been imposed. Consequently, the make-up of the boards shows a preponderance, on the workers' side, of union officials.

The total number of representatives on the 44 trade boards is 1,716, consisting of 136 appointed members, 790 employers' representatives, and 790 workers' representatives. Of the employers' representatives approximately 94 per cent are actual employers in the trades concerned. Of the workers' representatives, 301 (or 38 per cent) are full-time trade-union officials, of whom approximately 163 (or 21 per cent of the whole) have not been engaged in the trade concerned; 367 are actual workers nominated by various workers' organizations, and 122 are actual workers nominated by their fellow workers or appointed after inquiries made by the department. The size of a board varies from 15 (3 appointed members, 6 employers' representatives, and 6 workers' representatives) in the case of the chain trade board, to 83 (5 appointed members, 39 employers' representatives and 39 workers' representatives) in the case of the grocery trade board (England and Wales).

Trade board rates shared the general downward movement of wages during the period covered; 39 boards reduced the minimum rate for female workers, and 34 reduced the rate for male workers.

The percentage reductions for the lowest grade of men ranged from 24.1 per cent to 3.7 per cent; the corresponding percentages for women ranged from 26.3 per cent to 5.8 per cent. * * * In January, 1922, the cost of living was officially estimated to be 192, as compared with 100 in July, 1914. In March, 1923, the figure had fallen to 176, i. e., by 8.3 per cent, as compared with January, 1922.

Eight boards have adopted sliding scales, based upon the cost-of-living index published monthly in the Ministry of Labor Gazette. There is no uniformity of practice as to the degree of variation in the index to which a variation in the minimum rate shall correspond. "Some boards require a change of 5 points to justify a change of rates, while others require a change as large as 10 or even 20 points."

¹ Great Britain Ministry of Labor. Report on the administration of the trade boards' acts from Jan. 1, 1922, to Mar. 31, 1923. London, 1923.

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PRICES AND COST OF LIVING

Retail Prices of Food in the United States

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices:¹

Table 1 shows for the United States retail prices of food on March 15, 1923, and on February 15 and March 15, 1924, as well as the percentage changes in the year and in the month. For example, the price per dozen of strictly fresh eggs was 38.5 cents in March, 1923; 49.8 cents in February, 1924; and 34.8 cents in March, 1924. These figures show a decrease of 10 per cent in the year and 30 per cent in the month.

The cost of the various articles of food,² combined, showed an increase of 1 per cent in March, 1924, as compared with March, 1923, and a decrease of 2 per cent in March, 1924, as compared with February, 1924.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15, 1924, COMPARED WITH MARCH 15, 1923, AND FEBRUARY 15, 1924

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (−) Mar. 15, 1924, compared with—	
		Mar. 15, 1923	Feb. 15, 1924	Mar. 15, 1924	Mar. 15, 1923	Feb. 15, 1924
		Cents	Cents	Cents		
Sirloin steak.....	Pound.....	37.3	38.7	28.9	+4	+1
Round steak.....	do.....	31.7	33.0	33.1	+4	+0.3
Rib roast.....	do.....	27.6	28.3	28.6	+4	+1
Chuck roast.....	do.....	19.5	20.4	20.6	+6	+1
Plate beef.....	do.....	12.8	13.3	13.3	+4	0
Pork chops.....	do.....	28.3	26.7	26.9	−5	+1
Bacon.....	do.....	39.2	36.6	36.3	−7	−1
Ham.....	do.....	45.0	44.4	44.0	−2	−1
Lamb, leg of.....	do.....	36.0	35.7	37.1	+3	+4
Hens.....	do.....	35.8	35.1	35.9	+0.3	+2
Salmon, canned, red.....	do.....	31.2	31.2	31.1	−0.3	−0.3
Milk, fresh.....	Quart.....	13.6	14.0	13.9	+2	−1
Milk, evaporated.....	15-16 oz. can.....	12.2	12.1	12.1	−1	0
Butter.....	Pound.....	57.6	60.2	58.0	+1	−4
Oleomargarine.....	do.....	29.0	30.6	30.6	+6	0
Nut margarine.....	do.....	27.4	29.0	28.9	+5	−0.3
Cheese.....	do.....	37.1	37.2	36.6	−1	−2
Lard.....	do.....	17.4	18.0	17.5	+1	−3
Vegetable lard substitute.....	do.....	22.4	24.5	24.5	+9	0
Eggs, strictly fresh.....	Dozen.....	38.5	49.8	34.8	−10	−30

¹ In addition to monthly retail prices of food and coal, the bureau secures prices of gas and electricity from each of 51 cities. These prices are published at quarterly intervals in the MONTHLY LABOR REVIEW. Retail prices of dry goods were published quarterly until November, 1923.

² The following 22 articles, weighted according to the consumption of the average family, have been used from January, 1913, to December, 1920: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea. The remainder of the 43 articles shown in Tables 1 and 2 have been included in the weighted aggregates for each month beginning with January, 1921.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15, 1924, COMPARED WITH MARCH 15, 1923, AND FEBRUARY 15, 1924—Concluded

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (—) Mar. 15, 1924, compared with—	
		Mar. 15, 1923	Feb. 15, 1924	Mar. 15, 1924	Mar. 15, 1923	Feb. 15, 1924
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Bread.....	Pound.....	8.7	8.7	8.7	0	0
Flour.....	do.....	4.8	4.6	4.6	-4	0
Corn meal.....	do.....	4.0	4.4	4.4	+10	0
Rolled oats.....	do.....	8.8	8.8	8.8	0	0
Corn flakes.....	8-oz. package.....	9.7	9.7	9.7	0	0
Wheat cereal.....	28-oz. package.....	24.7	24.3	24.3	-2	0
Macaroni.....	Pound.....	19.8	19.6	19.5	-2	-1
Rice.....	do.....	9.4	9.8	9.7	+3	-1
Beans, navy.....	do.....	11.4	10.0	9.9	-13	-1
Potatoes.....	do.....	2.2	2.8	2.8	+27	0
Onions.....	do.....	5.4	6.0	5.9	+9	-2
Cabbage.....	do.....	6.6	5.4	6.2	-6	+15
Beans, baked.....	No. 2 can.....	13.0	12.9	12.8	-2	-1
Corn, canned.....	do.....	15.4	15.7	15.8	+3	+1
Peas, canned.....	do.....	17.4	17.9	18.0	+3	+1
Tomatoes, canned.....	do.....	12.9	12.9	12.9	0	0
Sugar, granulated.....	Pound.....	10.2	10.3	10.4	+2	+1
Tea.....	do.....	68.9	70.8	70.9	+3	+0.1
Coffee.....	do.....	37.9	38.8	40.8	+8	+5
Prunes.....	do.....	19.8	17.8	17.8	-10	0
Raisins.....	do.....	18.4	15.8	15.7	-15	-1
Bananas.....	Dozen.....	36.7	38.1	39.0	+6	+2
Oranges.....	do.....	47.9	39.5	38.3	-20	-4
All articles combined ¹.....	.....	.....	.....	.....	+1	-2

¹ See note 2, p. 29.

Table 2 shows for the United States average retail prices of specified food articles on March 15, 1913, and on March 15 of each year from 1918 to 1924, together with percentage changes in March of each of these specified years, compared with March, 1913. For example, the price per pound of sirloin steak was 24.7 cents in March, 1913; 33.8 cents in March, 1918; 41.8 cents in March, 1919; 40.8 cents in March, 1920; 39.1 cents in March, 1921; 35.9 cents in March, 1922; 37.3 cents in March, 1923; and 38.9 cents in March, 1924.

As compared with the average price in March, 1913, these figures show the following percentage increases: 37 per cent in March, 1918; 69 per cent in March, 1919; 65 per cent in March, 1920; 58 per cent in March, 1921; 45 per cent in March, 1922; 51 per cent in March, 1923; and 57 per cent in March, 1924.

The cost of the various articles of food combined showed an increase of 48 per cent in March, 1924, as compared with March, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH MARCH 15, 1913

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price Mar. 15—								Per cent of increase (+) or decrease (—) Mar. 15 of each specified year compared with Mar. 15, 1913							
		1913	1918	1919	1920	1921	1922	1923	1924	1918	1919	1920	1921	1922	1923	1924	
Sirloin steak.....	Pound.	Cts. 24.7	Cts. 33.8	Cts. 41.8	Cts. 40.8	Cts. 39.1	Cts. 35.9	Cts. 37.3	Cts. 38.9	+37	+69	+65	+58	+45	+51	+57	
Round steak.....	do	21.3	31.8	39.4	37.5	34.9	30.8	31.7	33.1	+49	+85	+76	+64	+45	+49	+55	
Rib roast.....	do	19.4	26.8	33.4	31.9	30.0	27.0	27.6	28.6	+38	+72	+64	+55	+39	+42	+47	
Chuck roast.....	do	15.6	23.2	28.4	25.1	22.5	19.3	19.5	20.6	+49	+82	+61	+44	+24	+25	+32	
Plate beef.....	do	11.8	18.2	22.1	18.2	15.7	13.0	12.8	13.3	+54	+87	+54	+33	+10	+8	+13	
Pork chops.....	do	20.3	33.9	38.6	39.1	35.3	31.3	28.3	26.9	+67	+90	+93	+74	+54	+39	+33	
Bacon.....	do	26.1	48.8	54.9	50.2	41.9	39.0	39.2	36.3	+87	+110	+92	+61	+49	+50	+39	
Ham.....	do	26.0	44.1	51.4	51.2	48.8	49.8	45.0	44.0	+70	+98	+97	+88	+92	+73	+69	
Lamb.....	do	19.1	31.7	38.0	39.8	34.4	37.5	36.0	37.1	+66	+99	+108	+80	+96	+88	+94	
Hens.....	do	21.4	41.1	45.7	43.2	37.8	35.8	35.9	35.1	+92	+114	+102	+77	+67	+68		
Salmon, canned, red.	do	29.5	32.1	37.6	38.8	32.6	31.2	31.1									
Milk, fresh.....	Quart.	8.9	13.4	15.3	16.6	15.2	13.0	13.6	13.9	+51	+72	+87	+71	+46	+53	+56	
Milk, evaporated.....	(²)			15.3	15.1	14.6	11.3	12.2	12.1								
Butter.....	Pound.	41.4	65.2	66.5	75.2	57.6	45.8	57.6	58.0	+33	+61	+82	+39	+11	+39	+40	
Oleomargarine.....	do			39.0	43.1	34.0	27.9	29.0	30.6								
Nut margarine.....	do			35.5	36.1	31.0	27.0	27.4	28.9								
Cheese.....	do	22.1	35.1	40.5	42.8	39.0	33.0	37.1	36.6	+59	+83	+94	+76	+49	+68	+66	
Lard.....	do	15.6	33.2	33.4	30.4	19.6	17.3	17.4	17.5	+113	+114	+95	+26	+11	+12	+12	
Vegetable lard substitute.....	do			33.2	37.5	24.6	21.9	22.4	24.5								
Eggs, strictly fresh.....	Dozen	26.4	44.3	48.3	55.6	41.7	31.8	38.5	34.8	+68	+83	+111	+58	+20	+46	+32	
Bread.....	Pound.	5.6	9.6	9.8	11.2	10.5	8.7	8.7	8.7	+71	+75	+100	+88	+55	+55	+55	
Flour.....	do	3.3	6.6	6.8	8.0	6.4	5.3	4.8	4.6	+100	+106	+142	+94	+61	+45	+39	
Corn meal.....	do	2.9	7.2	5.9	6.5	4.8	3.9	4.0	4.4	+148	+103	+124	+66	+34	+38	+52	
Rollod oats.....	do			8.3	10.3	10.2	8.8	8.8	8.8								
Corn flakes.....	(³)			14.1	14.1	13.2	10.2	9.7	9.7								
Wheat cereal.....	(⁴)			25.1	29.7	29.9	26.0	24.7	24.3								
Macaroni.....	Pound.			19.3	20.2	21.0	20.2	19.8	19.5								
Rice.....	do	8.6	12.0	13.4	18.4	9.8	9.3	9.4	9.7	+40	+56	+114	+14	+8	+9	+13	
Beans, navy.....	do		18.1	12.5	11.9	8.4	8.9	11.4	9.9								
Potatoes.....	do	1.5	2.5	2.9	6.8	2.5	3.1	2.2	2.8	+67	+93	+353	+67	+107	+47	+87	
Onions.....	do		4.0	6.0	9.4	3.8	11.6	5.4	5.9								
Cabbage.....	do			5.3	8.7	4.2	5.4	6.6	6.2								
Beans, baked.....	(⁵)			18.1	16.8	15.1	13.2	13.0	12.8								
Corn, canned.....	(⁵)			19.3	18.5	16.7	15.7	15.4	15.8								
Peas, canned.....	(⁵)			19.0	19.0	18.0	17.7	17.4	18.0								
Tomatoes, canned.....	(⁵)			16.4	15.1	11.8	13.6	12.9	12.9								
Sugar, granulated.....	Pound.	5.4	9.2	10.6	18.7	9.7	6.5	10.2	10.4	+70	+96	+246	+80	+20	+89	+93	
Tea.....	do	54.3	61.5	70.4	73.2	71.1	67.5	68.9	70.9	+13	+30	+35	+31	+24	+27	+31	
Coffee.....	do	29.8	30.4	37.6	49.1	37.1	35.6	37.9	40.8	+2	+26	+65	+24	+19	+27	+37	
Prunes.....	do		16.5	20.9	28.7	20.9	19.2	19.8	17.8								
Raisins.....	do		15.1	16.4	26.4	31.7	24.6	18.4	15.7								
Bananas.....	Dozen			36.6	41.4	41.6	36.9	36.7	39.0								
Oranges.....	do			53.2	62.0	43.7	53.9	47.9	38.3								
All articles combined ⁶										+59	+81	+106	+61	+43	+46	+48	

¹ Both pink and red.² 15-16 ounce can.³ 8-ounce package.⁴ 28-ounce package.⁵ No. 2 can.⁶ See note 2, p. 29.

Table 3 shows the changes in the retail prices of each of 22 articles of food³ as well as the changes in the amounts of these articles that could be purchased for \$1, each year, 1913 to 1923, and in March, 1924.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1, IN EACH YEAR, 1913 TO 1923, AND IN MARCH, 1924

Year	Sirloin steak		Round steak		Rib roast		Chuck roast		Plate beef		Pork chops	
	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1	Average retail price	Amt. for \$1
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>
1913.....	\$0.254	3.9	\$0.223	4.5	\$0.198	5.1	\$0.160	6.3	\$0.121	8.3	\$0.210	4.8
1914.....	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915.....	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916.....	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917.....	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918.....	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919.....	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920.....	.437	2.3	.395	2.5	.332	3.0	.262	3.8	.183	5.5	.423	2.4
1921.....	.388	2.6	.344	2.9	.291	3.4	.212	4.7	.143	7.0	.349	2.9
1922.....	.374	2.7	.323	3.1	.276	3.6	.197	5.1	.128	7.8	.330	3.0
1923.....	.391	2.6	.335	3.0	.284	3.5	.202	5.0	.129	7.8	.304	3.3
1924: March.....	.389	2.6	.331	3.0	.286	3.5	.206	4.9	.133	7.5	.269	3.7
	Bacon		Ham		Lard		Hens		Eggs		Butter	
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Dozs.</i>	<i>Per lb.</i>	<i>Lbs.</i>
1913.....	\$0.270	3.7	\$0.269	3.7	\$0.158	6.3	\$0.213	4.7	\$0.345	2.9	\$0.383	2.6
1914.....	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915.....	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916.....	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917.....	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918.....	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919.....	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920.....	.523	1.9	.555	1.8	.295	3.4	.447	2.2	.681	1.5	.701	1.4
1921.....	.427	2.3	.488	2.0	.180	5.6	.397	2.5	.509	2.0	.517	1.9
1922.....	.398	2.5	.488	2.0	.170	5.9	.360	2.8	.444	2.3	.479	2.1
1923.....	.391	2.6	.455	2.2	.177	5.6	.350	2.9	.465	2.2	.554	1.8
1924: March.....	.363	2.8	.440	2.3	.175	5.7	.359	2.8	.348	2.9	.580	1.7
	Cheese		Milk		Bread		Flour		Corn meal		Rice	
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per qt.</i>	<i>Qts.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>
1913.....	\$0.221	4.5	\$0.089	11.2	\$0.056	17.9	\$0.033	30.3	\$0.030	33.3	\$0.087	11.5
1914.....	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915.....	.233	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916.....	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917.....	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918.....	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919.....	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920.....	.416	2.4	.167	6.0	.115	8.7	.081	12.3	.065	15.4	.174	5.7
1921.....	.340	2.9	.146	6.8	.099	10.1	.058	17.2	.045	22.2	.095	10.5
1922.....	.329	3.0	.131	7.6	.087	11.5	.051	19.6	.039	25.6	.095	10.5
1923.....	.369	2.7	.138	7.2	.087	11.5	.047	21.3	.041	24.4	.095	10.5
1924: March.....	.366	2.7	.139	7.2	.087	11.5	.046	21.7	.050	20.0	.097	10.3
	Potatoes		Sugar		Coffee		Tea					
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per lb.</i>	<i>Lbs.</i>				
1913.....	\$0.017	58.8	\$0.055	18.2	\$0.298	3.4	\$0.544	1.8				
1914.....	.018	55.6	.059	16.9	.297	3.4	.546	1.8				
1915.....	.015	66.7	.066	15.2	.300	3.3	.545	1.8				
1916.....	.027	37.0	.080	12.5	.299	3.3	.546	1.8				
1917.....	.043	23.3	.093	10.8	.302	3.3	.582	1.7				
1918.....	.032	31.3	.097	10.3	.305	3.3	.648	1.5				
1919.....	.038	26.3	.113	8.8	.433	2.3	.701	1.4				
1920.....	.063	15.9	.194	5.2	.470	2.1	.733	1.4				
1921.....	.031	32.3	.080	12.5	.363	2.8	.697	1.4				
1922.....	.028	35.7	.073	13.7	.361	2.8	.681	1.5				
1923.....	.029	34.5	.101	9.9	.377	2.7	.695	1.4				
1924: March.....	.028	35.7	.104	9.6	.408	2.5	.709	1.4				

³ Although monthly prices on 43 food articles have been secured since January, 1919, prices on only 22 of these articles have been secured each month since 1913.

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Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of each of 22 food articles,⁴ by years from 1907 to 1923, and by months for 1923,⁵ and for January to March, 1924. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1920 was 168, which means that the average money price for the year 1920 was 68 per cent higher than the average money price for the year 1913. The relative price of bacon for the year 1919 was 205 and for the year 1920 it was 194, which figures show a drop of 11 points but a decrease of only 5 per cent in the year.

In the last column of Table 4 are given index numbers showing the changes in the retail cost of all articles of food combined. From January, 1913, to December, 1920, 22 articles have been included in the index, and beginning with January, 1921, 43 articles have been used.⁴ For an explanation of the method used in making the link between the cost of the market basket of 22 articles, weighted according to the average family consumption in 1901, and the cost of the market basket based on 43 articles and weighted according to the consumption in 1918, see MONTHLY LABOR REVIEW for March, 1921 (p. 25).

The curve shown in the chart on page 35 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The retail cost of the food articles included in the index has decreased since July, 1920, until the curve is brought down in March, 1924, to approximately where it was in April, 1917. The chart has been drawn on the logarithmic scale,⁶ because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

⁴ See note 2, p. 29.

⁵ For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19-21.

⁶ For a discussion of the logarithmic chart see article on "Comparison of arithmetic and ratio charts," by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 20-24. Also "The 'ratio' charts," by Prof. Irving Fisher, reprinted from Quarterly Publications of the American statistical Association, June, 1917, 24 pp.

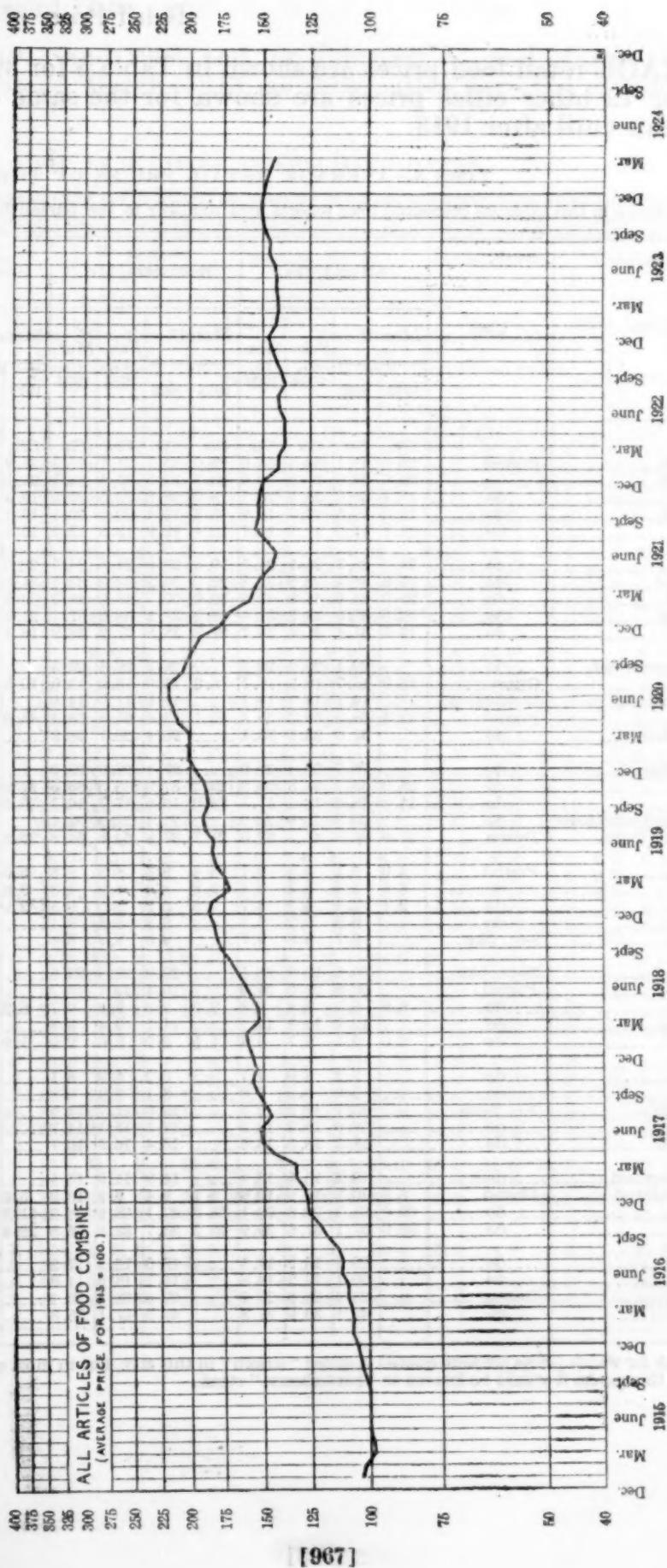
TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS, 1907 TO 1923, BY MONTHS FOR 1923 AND FOR JANUARY TO MARCH, 1924

[Average for year 1913=100]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Ba- con	Ham	Lard	Hens	Eggs	But- ter	Cheese	Milk	Bread	Flour	Corn meal	Rice	Pota- toes	Su- gar	Cof- fee	Tea	All articles com- bined
1907.....	71	68	76	74	74	74	74	76	81	81	84	85	---	87	---	95	88	---	105	105	---	---	82
1908.....	73	71	78	77	76	76	77	78	80	83	86	86	---	90	---	102	92	---	111	108	---	---	84
1909.....	77	74	81	83	83	83	83	82	82	89	93	90	---	91	---	109	94	---	112	107	---	---	89
1910.....	80	78	85	92	95	92	95	91	104	94	98	94	---	95	---	108	95	---	101	109	---	---	93
1911.....	81	79	85	91	91	91	91	89	88	91	93	88	---	96	---	102	94	---	130	111	---	---	92
1912.....	91	89	94	91	91	91	91	91	94	93	99	98	---	97	---	105	102	---	132	115	---	---	98
1913.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1914.....	102	106	103	104	104	105	102	102	99	102	102	94	104	100	112	104	105	101	108	108	100	100	102
1915.....	101	103	101	101	101	96	100	97	93	97	99	93	105	99	124	126	108	104	89	120	101	100	101
1916.....	108	110	107	107	106	108	106	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114
1917.....	124	130	126	131	130	152	152	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	146
1918.....	153	165	155	166	170	186	196	178	211	177	165	151	162	156	175	203	227	148	188	176	102	119	168
1919.....	164	174	164	169	167	201	205	199	234	193	182	177	193	174	179	218	213	174	224	205	145	129	186
1920.....	172	177	168	164	151	201	194	206	187	210	197	183	188	188	205	245	217	200	371	353	158	135	203
1921.....	153	154	147	133	118	166	158	181	114	186	148	135	154	164	177	176	150	109	182	145	122	128	153
1922.....	147	145	139	123	106	157	147	181	108	169	129	125	149	147	155	155	130	109	165	133	121	125	142
1923: Av. for year.....	154	150	143	126	107	145	145	169	112	164	135	145	167	155	155	142	137	109	171	184	127	128	146
January.....	146	142	139	123	107	140	147	168	110	162	161	154	170	154	155	148	133	109	124	151	124	126	144
February.....	146	141	139	122	106	137	146	167	110	167	134	151	170	154	155	148	133	108	124	151	124	126	144
March.....	147	142	139	122	106	135	145	167	110	168	112	150	168	153	155	145	133	108	129	185	127	127	142
April.....	149	145	140	123	105	135	145	168	111	169	100	150	164	153	155	145	133	108	147	193	128	127	143
May.....	152	148	142	124	105	143	145	168	109	170	102	136	161	152	155	145	133	108	159	204	128	127	143
June.....	158	155	145	128	104	142	144	169	109	166	103	131	163	152	155	145	133	108	188	202	127	128	144
July.....	161	159	148	130	106	149	145	171	108	163	108	128	164	153	157	142	137	108	247	191	127	128	147
August.....	162	159	147	130	105	153	145	172	108	162	120	135	164	154	155	136	137	108	218	175	127	128	146
September.....	162	159	148	131	108	175	146	173	113	164	141	144	167	157	155	136	140	109	200	175	126	129	149
October.....	158	154	146	130	108	163	146	172	115	163	158	147	174	158	155	139	143	110	171	193	127	129	150
November.....	153	148	143	128	107	138	143	169	120	158	192	154	171	161	156	139	147	111	153	187	127	129	151
December.....	152	148	143	128	107	126	139	166	120	157	185	157	171	161	155	136	147	111	153	189	127	129	150
1924: January.....	154	149	144	129	110	130	138	166	118	162	158	160	169	160	155	136	147	113	165	185	128	131	149
February.....	152	148	143	128	110	127	136	165	114	165	144	157	168	157	155	139	147	113	165	187	130	130	147
March.....	153	145	144	129	110	128	134	164	111	169	101	151	166	156	155	139	147	111	165	189	137	130	144

[1966]

TREND IN RETAIL PRICES OF FOOD FOR THE UNITED STATES, JANUARY, 1915, TO MARCH, 1924



[1967]

Retail Prices of Food in 51

AVERAGE retail food prices are shown in Table 5 for 39 cities for For 12 other cities prices are shown for the same dates with the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

[The prices shown in this table are computed from reports sent monthly to the bureau by retail dealers.]

Article	Unit	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,
				1924	1924			1924	1924			1924	1924
		1913	1923			1913	1923			1913	1923		
Sirloin steak	Pound	Cts. 22.6	Cts. 33.1	Cts. 34.4	Cts. 35.0	Cts. 22.0	Cts. 35.7	Cts. 37.1	Cts. 37.3	Cts. 24.9	Cts. 34.4	Cts. 36.5	Cts. 36.3
Round steak	do	20.5	28.9	31.2	30.9	20.7	32.5	33.4	33.7	21.3	29.7	32.3	32.7
Rib roast	do	18.4	26.0	25.5	26.1	18.0	28.5	29.5	30.0	19.3	26.4	25.6	26.4
Chuck roast	do	13.0	18.6	19.7	19.9	15.3	19.4	20.1	20.1	16.1	21.0	20.9	21.0
Plate beef	do	11.1	11.9	11.2	11.7	12.4	12.9	13.3	12.9	10.5	12.6	13.3	13.6
Pork chops	do	21.5	26.7	25.1	24.5	19.3	27.6	24.5	24.7	20.0	28.1	26.5	25.8
Bacon, sliced	do	31.0	35.4	32.9	32.8	22.0	34.2	32.3	32.1	31.3	40.9	38.2	37.7
Ham, sliced	do	29.0	45.0	43.8	43.8	30.0	50.7	48.8	48.2	30.0	45.8	44.0	43.6
Lamb, leg of	do	20.6	35.9	33.3	34.4	18.3	37.5	38.0	37.7	21.3	37.5	37.0	36.4
Hens	do	19.3	31.4	31.4	32.7	21.8	38.8	37.2	38.9	18.7	31.6	31.7	31.9
Salmon, canned, red	do		29.1	29.5	29.3		26.7	26.4	26.3		30.6	30.0	30.3
Milk, fresh	Quart	10.0	16.7	19.3	17.7	8.8	13.0	13.0	13.0	10.3	18.5	18.5	18.5
Milk, evaporated	15-16 oz. can		14.1	14.1	14.1		11.9	11.9	11.8		13.2	13.2	13.2
Butter	Pound	42.4	58.5	59.3	58.4	42.1	63.6	65.4	63.4	45.0	60.1	62.3	62.1
Oleomargarine	do		31.0	33.1	33.1		25.4	28.1	28.3		33.5	34.5	34.5
Nut margarine	do		26.7	28.4	28.0		27.1	27.0	27.0		30.5	33.3	33.6
Cheese	do	25.0	35.7	35.8	35.3	23.3	37.9	36.5	36.5	21.8	36.4	37.7	36.6
Lard	do	14.8	18.0	18.1	17.1	14.0	16.6	17.7	16.7	15.4	17.6	17.9	17.5
Vegetable lard substitute	do		20.0	22.9	22.9		21.4	23.9	24.4		19.0	21.0	20.9
Eggs, strictly fresh	Dozen	20.9	34.5	47.3	32.6	21.7	37.8	50.6	34.5	25.5	32.9	48.4	33.1
Bread	Pound	6.0	9.1	9.1	9.1	5.4	8.4	8.8	8.8	5.0	8.9	8.8	8.8
Flour	do	3.6	5.4	5.3	5.4	3.2	4.6	4.2	4.3	3.8	5.8	5.5	5.5
Corn meal	do	2.4	3.4	3.7	3.7	2.5	3.2	3.5	3.5	2.1	3.0	3.4	3.5
Rolled oats	do		9.2	9.2	9.1		8.8	8.5	8.4		9.3	9.2	9.2
Corn flakes	8-oz. pkg		9.7	9.8	9.7		9.0	8.7	8.8		9.9	10.1	10.1
Wheat cereal	28-oz. pkg		26.2	26.9	26.5		23.2	22.8	22.8		26.5	26.0	25.9
Macaroni	Pound		20.8	21.0	21.0		19.4	19.1	18.7		19.0	19.1	19.2
Rice	do	8.6	8.3	8.8	8.8	9.0	9.3	9.6	9.7	8.2	9.3	9.6	9.7
Beans, navy	do		12.9	12.3	12.1		11.1	9.4	9.3		11.7	11.3	11.9
Potatoes	do	2.0	3.1	3.7	3.4	1.5	2.2	3.0	2.9	1.9	3.3	4.0	3.9
Onions	do		7.2	8.0	7.7		6.2	6.3	6.1		6.1	7.1	7.1
Cabbage	do		9.0	6.9	7.0		8.1	6.9	8.8		8.5	6.4	6.9
Beans, baked	No. 2 can		13.7	12.6	12.5		12.0	11.7	11.6		14.3	13.6	13.3
Corn, canned	do		16.0	16.9	16.3		14.5	15.1	14.7		16.5	16.2	16.5
Peas, canned	do		18.3	18.5	18.5		16.4	16.5	16.7		20.1	20.8	21.4
Tomatoes, canned	do		13.2	13.5	13.4		11.9	11.5	11.5		11.6	12.3	12.3
Sugar, granulated	Pound	5.6	10.8	10.9	10.9	5.1	9.4	9.9	10.0	5.2	10.2	10.5	10.6
Tea	do	60.0	91.3	92.8	93.1	56.0	67.1	68.9	68.9	61.3	81.6	85.4	86.2
Coffee	do	32.0	37.1	37.6	39.9	25.2	33.7	33.6	36.8	28.8	38.0	38.3	39.0
Prunes	do		20.7	18.9	18.5		18.0	16.2	17.2		20.9	19.6	20.2
Raisins	do		20.1	17.3	16.8		15.7	13.9	14.0		19.5	17.4	17.5
Bananas	Dozen		24.4	26.8	29.0		27.6	28.6	29.1		33.6	36.7	40.8
Oranges	do		42.5	30.9	31.8		47.5	37.1	35.8		42.9	35.8	36.2

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

Cities on Specified Dates

March 15, 1913 and 1923, and for February 15, and March 15, 1924. the exception of March, 1913, as these cities were not scheduled by

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

As some dealers occasionally fail to report, the number of quotations varies from month to month

Boston, Mass.			Bridgeport, Conn.			Buffalo, N. Y.			Butte, Mont.			Charleston, S. O.					
Mar. 15—		Feb. 15, 1924	Mar. 15, 1924	Mar. 15, 1923	Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924	Mar. 15, 1923	Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924
1913	1923						1913	1923						1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
134.6	158.5	162.5	162.9	42.9	45.2	45.7	22.0	36.5	37.1	36.7	27.9	27.8	27.4	21.0	35.3	33.2	34.0
33.0	46.2	50.9	49.8	36.1	38.3	38.6	19.0	30.0	31.2	31.1	24.7	24.0	24.2	20.0	32.7	30.9	31.0
23.4	35.4	37.8	38.6	32.7	34.8	34.9	17.3	27.1	28.3	27.8	22.3	22.4	22.0	19.3	28.6	27.3	27.5
17.7	22.8	24.0	24.7	23.2	24.6	24.7	15.3	19.8	20.7	20.8	16.0	16.2	16.2	15.0	21.4	20.0	21.0
-----	14.6	15.3	15.7	9.9	10.5	10.7	11.5	11.9	12.0	12.3	11.3	10.8	11.0	11.4	15.0	13.6	14.5
22.2	30.1	29.0	29.9	28.9	28.6	28.5	19.3	29.9	28.0	27.3	26.8	24.8	24.2	23.0	29.5	28.2	27.0
25.4	37.5	36.5	36.0	44.9	42.4	42.4	21.0	32.8	30.1	29.3	45.9	45.5	45.5	24.3	35.8	35.3	33.8
28.8	49.9	49.2	49.3	52.8	49.1	48.4	25.0	46.5	44.9	44.6	49.1	50.5	49.5	26.7	42.3	42.5	40.7
21.8	38.0	37.2	39.4	35.7	35.0	38.2	17.3	31.7	30.0	32.2	30.4	31.6	32.7	21.3	43.1	41.3	40.6
24.2	39.2	39.3	39.6	39.4	38.7	39.7	21.7	36.2	35.7	36.9	30.3	30.3	30.3	30.3	36.9	34.8	35.0
-----	29.0	29.4	29.5	30.0	29.4	29.2	-----	27.3	27.9	27.0	36.8	38.0	38.2	-----	26.7	26.8	26.8
8.9	14.5	13.9	12.9	15.0	15.0	15.0	8.0	13.0	12.5	12.5	14.2	14.3	14.3	11.7	18.0	18.0	18.5
-----	12.6	12.7	12.7	12.5	12.5	12.5	-----	11.9	11.7	11.7	12.3	12.3	11.8	-----	12.2	12.0	12.0
41.4	60.6	61.7	60.4	58.2	60.7	59.0	40.6	58.5	61.4	57.7	53.2	55.5	54.7	40.4	56.7	59.2	58.4
-----	31.0	31.6	30.5	28.3	30.2	30.0	-----	28.0	30.2	30.1	30.5	-----	-----	-----	28.0	30.1	30.8
25.6	27.9	27.9	27.8	28.3	28.8	-----	26.6	28.1	28.1	31.7	33.7	33.5	-----	28.0	31.0	31.5	-----
22.4	38.6	40.5	39.8	37.9	39.7	38.9	21.5	36.3	37.2	36.3	36.7	40.0	40.0	21.0	35.6	35.0	34.3
15.7	18.1	18.7	18.3	17.4	18.0	17.1	14.1	16.6	17.3	16.4	20.5	21.2	20.9	15.0	18.7	19.8	19.4
-----	24.2	23.1	22.9	22.3	25.2	24.6	-----	22.3	23.8	23.8	26.3	27.1	26.7	-----	22.3	23.5	23.9
32.8	57.1	67.7	49.6	52.9	64.3	46.0	24.7	42.7	57.9	37.7	46.3	52.2	37.5	26.3	35.4	47.5	34.1
5.9	8.4	8.4	8.4	8.3	8.4	8.4	5.6	8.3	8.4	8.4	9.7	9.6	9.7	6.2	9.5	10.8	10.8
3.7	5.4	5.0	5.1	4.9	4.6	4.7	2.9	4.2	4.3	4.4	5.4	5.0	5.0	3.7	6.0	5.7	5.8
3.5	4.8	5.1	5.2	6.5	7.0	7.2	2.5	3.8	4.4	4.3	3.9	4.1	4.1	2.3	3.1	3.5	3.4
-----	8.7	9.0	8.8	8.6	8.3	8.3	-----	7.6	7.9	7.9	6.6	6.8	6.7	-----	9.5	9.3	9.3
-----	9.8	9.6	9.6	9.7	9.4	9.3	-----	9.2	9.2	8.9	11.9	12.1	12.1	-----	10.0	9.9	9.9
24.9	23.8	24.0	23.9	23.5	23.5	-----	24.7	23.9	24.0	28.8	28.3	27.9	-----	25.0	24.7	24.7	-----
-----	23.7	23.0	22.7	23.7	23.2	23.1	-----	21.7	21.2	20.8	21.3	20.6	20.8	-----	20.2	19.6	19.6
9.2	11.0	10.9	11.2	10.5	10.1	10.1	9.3	9.0	9.5	9.7	9.8	10.3	10.1	5.6	6.3	7.0	7.0
-----	10.6	10.3	10.2	11.6	10.9	10.8	-----	11.3	10.0	10.1	10.1	10.8	10.6	-----	12.0	11.1	10.9
1.6	2.5	2.8	2.9	2.5	2.9	2.9	1.4	1.7	2.3	2.4	1.1	1.8	1.8	2.0	2.6	3.2	3.2
6.6	6.4	6.2	6.1	7.0	6.5	-----	5.2	7.0	7.1	4.2	5.1	5.2	-----	5.5	6.5	6.6	-----
8.6	5.7	8.2	8.2	5.8	7.2	-----	5.4	4.0	5.6	5.5	5.3	6.9	-----	4.8	4.5	6.7	-----
14.3	14.2	14.5	12.2	12.5	12.4	-----	11.0	10.8	10.8	17.5	16.7	16.5	-----	11.4	10.9	10.9	-----
19.2	18.6	18.4	18.9	19.1	19.2	-----	15.3	15.7	15.3	15.3	15.2	15.2	-----	14.6	14.3	14.4	-----
21.5	21.1	21.4	21.3	21.7	21.7	-----	16.0	16.9	16.4	16.3	16.2	16.0	-----	18.2	17.9	17.5	-----
13.2	12.1	12.4	13.1	13.6	13.8	-----	13.7	14.1	13.8	15.1	13.6	13.1	-----	10.8	10.6	10.8	-----
5.3	10.3	10.4	10.4	9.7	9.9	9.8	5.3	10.1	10.3	10.1	12.2	12.3	12.3	5.0	9.7	10.0	10.0
58.6	68.6	69.9	70.1	57.6	58.6	58.6	45.0	60.9	62.6	64.6	80.0	83.3	83.3	50.0	70.7	71.6	71.6
33.0	43.1	44.3	47.3	36.3	37.4	39.6	29.3	35.5	34.4	37.8	45.0	47.2	48.3	26.0	32.8	32.8	34.9
20.0	17.7	17.6	19.9	18.4	18.2	-----	19.1	17.7	16.4	20.3	18.9	18.9	-----	20.2	17.6	17.8	-----
16.8	14.9	14.9	17.7	15.1	14.9	-----	16.3	14.4	14.2	21.3	19.1	18.9	-----	18.2	15.2	15.2	-----
50.1	49.5	50.5	36.7	38.0	36.7	-----	47.4	49.3	49.0	15.4	16.6	16.6	-----	36.9	38.8	41.9	-----
52.6	43.2	41.1	46.5	39.5	38.4	-----	56.5	45.1	48.8	44.6	41.7	38.2	-----	38.3	30.2	30.5	-----

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ART

Article	Unit	Chicago, Ill.				Cincinnati, Ohio				Cleveland, Ohio			
		Mar. 15—		Feb.	Mar.	Mar. 15—		Feb.	Mar.	Mar. 15—		Feb.	Mar.
				15,	15,			15,	15,			15,	15,
		1913	1923	1924	1924	1913	1923	1924	1924	1913	1923	1924	1924
Sirloin steak	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Round steak	do	22.0	37.3	40.3	40.0	22.4	33.8	33.8	34.0	23.7	33.9	35.5	35.7
Rib roast	do	18.9	28.8	31.1	31.3	19.9	30.0	30.3	30.0	21.0	27.5	29.3	29.6
Chuck roast	do	19.4	29.1	31.3	31.3	19.0	28.2	27.8	27.8	19.2	24.9	25.3	25.4
Plate beef	do	15.3	18.9	20.8	20.6	14.9	17.9	17.9	18.0	16.2	19.3	20.0	20.1
	do	11.2	11.7	12.3	12.4	12.1	14.6	14.4	14.3	11.8	11.2	11.8	11.6
Pork chops	do	17.9	24.7	24.6	26.0	20.6	26.7	24.6	26.3	19.8	27.5	28.2	26.4
Bacon, sliced	do	29.8	44.2	41.5	41.4	25.0	32.9	29.2	28.8	25.6	39.6	37.7	36.3
Ham, sliced	do	31.3	46.9	46.8	46.1	26.8	45.2	45.1	45.1	33.5	47.0	48.5	48.0
Lamb, leg of	do	19.7	34.4	35.6	36.6	17.4	34.0	33.1	33.3	20.3	34.6	34.0	35.2
Hens	do	19.9	34.1	33.6	34.6	23.3	38.3	36.7	37.5	22.7	38.5	36.5	37.5
Salmon, canned, red	do		31.3	32.7	32.5		28.0	27.8	27.6		29.6	29.3	29.3
Milk, fresh	Quart.	8.0	13.0	14.0	14.0	8.0	12.0	14.0	14.0	8.8	14.0	14.0	14.0
Milk, evaporated	15-16 oz. can.		11.2	11.5	11.5		11.6	11.5	11.4		11.9	11.3	11.4
Butter	Pound	40.4	55.7	58.4	55.8	42.9	57.3	60.5	57.5	43.4	59.4	61.5	58.3
Oleomargarine	do		25.3	27.2	26.9		29.7	32.0	31.5		28.7	31.6	31.8
Nut margarine	do		24.2	25.8	25.8		27.8	28.5	29.1		27.1	30.5	30.6
Cheese	do	25.0	40.6	40.1	40.1	21.6	38.1	36.7	35.6	23.0	36.6	37.3	36.8
Lard	do	14.6	16.6	18.2	17.7	14.0	15.9	16.1	15.4	16.1	17.9	19.2	18.7
Vegetable lard substitute	do		23.2	25.0	25.1		22.6	24.9	24.7		23.7	26.3	26.6
Eggs, strictly fresh	Dozen	23.4	39.5	49.2	35.9	20.5	30.1	44.1	29.8	27.2	38.9	52.8	34.5
Bread	Pound	6.1	9.7	9.7	9.7	4.8	8.4	8.4	8.4	5.5	7.9	7.9	7.9
Flour	do	2.7	4.1	4.1	4.1	3.4	4.5	4.4	4.5	3.2	4.7	4.5	4.5
Corn meal	do	2.9	5.2	5.1	5.4	2.5	2.8	3.6	3.6	2.7	3.8	4.2	4.2
Rolled oats	do		7.9	8.5	8.5		8.7	8.2	8.3		8.4	8.9	8.9
Corn flakes	8-oz. pkg.		9.6	9.3	9.4		9.5	9.0	9.1		9.9	10.0	10.0
Wheat cereal	28-oz. pkg.		23.9	23.4	23.4		23.2	23.0	23.1		24.7	24.7	24.1
Macaroni	Pound		18.2	18.4	18.1		16.1	16.4	16.7		18.3	19.3	20.0
Rice	do	9.0	10.1	10.3	10.3	8.8	8.9	10.0	10.0	8.5	8.9	9.8	9.5
Beans, navy	do		11.5	10.1	10.0		10.9	8.1	8.0		11.4	9.4	9.1
Potatoes	do	1.3	1.9	2.7	2.6	1.4	2.1	2.6	2.5	1.4	2.3	2.5	2.5
Onions	do		5.0	6.0	5.9		5.3	5.2	5.0		5.0	5.9	5.7
Cabbage	do		7.2	6.3	6.6		6.5	4.8	6.6		6.8	5.3	7.6
Beans, baked	No. 2 can.		12.9	12.6	12.6		11.7	12.0	11.9		12.6	13.0	12.4
Corn, canned	do		14.5	15.4	15.2		14.0	14.0	14.1		15.8	16.3	16.4
Peas, canned	do		15.4	17.4	17.3		16.5	17.6	17.6		17.3	17.8	17.6
Tomatoes, canned	do		13.5	14.2	13.9		12.3	12.7	12.8		13.7	13.8	13.8
Sugar, granulated	Pound	4.9	9.3	9.9	10.0	5.1	9.9	10.1	10.1	5.5	10.2	10.4	10.5
Tea	do	53.3	70.0	73.4	72.9	60.0	69.1	74.5	74.5	50.0	68.5	67.1	67.5
Coffee	do	30.0	37.7	38.6	41.1	25.6	33.3	34.6	36.0	26.5	40.4	41.9	44.0
Prunes	do		19.9	18.9	18.7		19.6	18.6	18.4		19.9	17.7	17.2
Raisins	do		19.0	16.6	16.5		18.5	15.7	15.8		17.9	15.5	15.5
Bananas	Dozen		38.2	42.8	46.1		40.7	42.5	45.0		49.8	52.9	50.7
Oranges	do		52.6	40.1	37.8		41.9	33.8	31.8		51.8	45.4	41.5

¹ The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

		Columbus, Ohio			Dallas, Tex.			Denver, Colo.			Detroit, Mich.			Fall River, Mass.		
Mar. 15, 1924	Mar. 15, 1924	Mar. 15, 1924	Mar. 15—		Mar. 15, 1924	Mar. 15, 1924	Mar. 15, 1924	Mar. 15—		Mar. 15, 1924	Mar. 15, 1924	Mar. 15, 1924	Mar. 15, 1924	Mar. 15—		Mar. 15, 1924
			1913	1923				1913	1923					1913	1923	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
35.5	35.7	37.3	21.8	33.5	33.6	34.1	22.7	29.1	29.2	28.9	24.0	35.8	37.5	37.1	32.0	55.9
29.3	29.6	31.7	20.3	31.0	29.8	29.8	19.6	24.0	25.0	24.5	19.4	27.4	29.7	29.7	25.0	41.0
25.3	25.4	28.5	18.8	27.0	26.3	27.0	16.6	21.2	21.5	21.5	19.8	25.7	27.1	26.8	22.0	27.0
20.0	20.1	22.2	15.6	21.3	21.3	20.7	14.6	16.0	16.8	17.3	15.4	18.6	19.8	19.8	17.0	19.8
1.8	11.6	14.7	12.5	15.1	15.8	15.2	9.4	9.5	9.7	9.6	11.0	11.5	12.2	12.1	11.6	13.1
28.2	26.4	25.1	21.2	27.5	27.7	27.3	17.6	25.7	24.1	24.0	18.6	26.7	27.1	27.5	19.5	27.5
37.7	36.5	37.5	37.2	37.0	39.1	39.2	38.5	27.0	43.0	40.3	23.0	39.5	36.0	35.7	25.0	37.7
48.0	48.0	45.3	45.3	31.3	50.0	49.6	49.2	28.3	49.4	46.3	45.9	25.5	48.3	47.3	48.5	29.7
4.0	35.2	39.6	42.5	22.0	46.0	38.3	42.2	16.9	34.1	34.2	34.7	17.2	36.1	35.3	37.8	19.3
6.5	37.5	33.6	34.6	19.6	30.6	29.8	29.4	20.7	30.8	28.9	20.8	21.6	36.6	35.3	37.5	24.5
9.3	29.3	31.6	32.0	31.6	30.1	30.2	32.7	32.8	32.8	29.3	29.3	29.7	29.7	29.7	30.7	31.4
4.0	14.0	13.0	13.0	10.0	15.0	15.0	8.4	11.8	11.7	11.7	8.0	14.0	14.0	14.0	9.0	14.0
1.3	11.4	11.8	11.8	13.5	14.0	14.1	11.7	12.1	12.1	11.7	11.7	11.6	11.6	11.6	13.7	13.4
1.5	58.3	59.5	55.6	39.0	57.2	60.9	57.8	39.0	52.7	56.4	54.6	40.6	58.9	60.3	58.0	57.8
1.6	31.8	30.2	30.2	27.5	34.0	34.0	29.2	32.6	31.0	28.4	30.6	30.4	30.4	30.4	30.0	31.5
0.5	30.6	28.5	28.6	29.4	32.1	32.6	28.3	29.8	29.6	26.8	27.9	27.8	27.8	27.7	30.7	30.7
7.3	36.8	37.1	36.2	20.0	36.2	37.5	36.1	38.5	38.4	37.8	21.3	36.5	37.0	37.4	24.0	38.3
2.2	18.7	15.9	15.6	17.0	20.9	22.4	16.3	19.1	18.6	17.8	16.2	17.2	18.1	17.8	15.0	16.9
3.3	26.6	25.4	25.0	20.0	21.6	21.4	21.1	24.8	25.0	23.1	24.9	25.6	23.4	25.4	25.4	25.4
8.8	34.5	48.9	30.3	24.0	28.7	27.3	26.1	31.0	41.5	30.8	25.2	41.3	55.4	33.1	32.9	58.4
9.9	7.9	7.7	7.7	5.6	8.9	8.7	5.3	8.2	7.7	7.7	5.6	8.6	8.8	8.8	6.2	9.1
2.5	4.5	4.2	4.2	3.3	4.6	4.5	2.6	3.9	3.6	3.6	3.1	4.3	4.2	4.2	3.2	5.1
9.9	4.2	3.0	3.7	2.6	3.5	4.6	4.5	2.4	3.3	3.3	2.7	4.3	4.8	4.7	3.4	5.8
0.0	8.9	9.5	9.4	10.5	10.8	10.7	9.1	9.0	8.9	8.9	8.9	8.9	8.9	8.9	9.7	9.7
7.7	10.0	9.7	9.7	10.8	9.8	9.8	9.9	10.0	9.8	9.0	9.1	9.1	9.1	9.1	9.8	10.0
7.7	24.1	24.6	24.6	25.9	25.3	24.3	24.6	24.5	24.5	23.8	24.1	23.9	23.9	27.5	25.4	25.3
3.3	20.0	18.8	18.2	21.1	20.9	21.5	20.8	20.2	19.9	18.7	19.1	19.0	19.0	24.0	23.5	23.6
8.8	9.5	10.3	10.3	10.2	11.2	11.4	9.7	9.9	9.9	9.8	9.6	9.9	10.0	9.9	10.2	10.2
4.4	9.1	8.5	8.3	11.6	11.6	11.4	12.2	11.3	11.2	11.1	8.1	8.4	8.4	10.5	10.3	10.2
5.5	2.5	2.1	2.6	1.8	3.4	4.0	1.0	1.7	2.4	2.4	1.2	1.5	1.9	1.9	1.7	2.5
9.9	5.7	6.7	6.8	6.4	6.9	7.5	7.4	4.2	4.7	4.8	4.9	5.2	4.9	5.8	6.5	6.6
3.3	7.6	7.9	5.5	7.1	6.4	5.9	5.6	4.6	3.3	4.6	6.7	5.6	7.2	8.7	7.0	8.2
0.0	12.4	13.5	13.7	13.7	14.7	14.8	14.9	14.0	14.0	14.0	12.1	12.0	12.1	12.9	12.9	12.7
3.3	16.4	12.5	12.9	13.4	16.9	17.2	17.2	14.8	15.0	15.1	15.3	15.6	15.7	15.8	16.6	16.6
8.8	17.6	14.6	15.9	16.7	21.1	21.8	21.7	16.3	16.9	16.9	17.4	17.5	17.3	17.8	18.0	18.4
8.8	13.8	13.1	13.5	13.6	14.3	14.2	14.4	13.2	13.8	13.9	13.1	12.9	12.6	13.6	13.8	13.8
4.4	10.5	10.1	10.2	10.4	10.9	11.4	11.4	11.2	10.9	11.1	5.0	10.3	10.1	10.1	5.2	10.5
1.1	67.5	76.3	79.4	66.7	91.8	97.6	52.8	68.1	68.5	68.5	43.3	65.8	64.3	64.3	44.2	60.2
9.9	44.0	36.9	39.0	36.7	42.7	44.5	46.5	36.5	38.1	39.9	29.3	39.0	38.3	39.8	33.0	39.5
7.7	17.2	20.7	19.7	19.3	23.1	19.1	19.5	21.2	18.8	18.8	20.0	17.8	17.7	18.4	16.7	16.6
9.9	15.5	18.5	16.4	15.8	19.7	17.5	16.9	19.5	15.4	15.3	17.4	15.9	15.9	18.9	16.3	16.5
9.9	50.7	38.6	40.0	39.1	31.4	33.6	36.4	13.4	14.6	14.7	34.2	36.0	36.8	10.9	11.7	11.4
41.5	41.5	45.9	38.3	37.2	51.1	51.2	46.4	49.2	35.5	35.7	50.4	46.0	44.5	50.5	40.1	38.4

¹ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Mar.	Feb.	Mar.	Mar. 15—		Feb.	Mar.	Mar. 15—		Feb.	Mar.
		15, 1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924
Sirloin steak	Pound	Cts. 29.9	Cts. 28.6	Cts. 28.9	Cts. 24.8	Cts. 35.0	Cts. 35.5	Cts. 35.4	Cts. 25.8	Cts. 34.1	Cts. 34.8	Cts. 37.0
Round steak	do	29.3	27.9	28.0	23.2	33.3	34.2	34.2	20.3	28.6	29.6	30.8
Rib roast	do	24.3	22.4	23.3	17.2	24.8	26.2	26.2	25.0	26.9	27.2	28.5
Chuck roast	do	19.9	18.5	18.2	15.5	21.0	21.8	21.9	15.8	17.5	18.5	18.2
Plate beef	do	15.9	15.2	15.5	12.3	13.9	13.7	13.7	10.3	11.1	10.5	10.6
Pork chops	do	26.7	25.9	25.9	20.0	27.4	24.5	25.3	23.0	28.2	28.4	28.0
Bacon, sliced	do	44.5	42.5	41.1	28.0	37.2	32.9	32.9	26.0	36.9	32.7	32.5
Ham, sliced	do	45.6	45.0	45.4	29.5	48.9	46.4	47.5	26.8	45.0	44.5	44.0
Lamb, leg of	do	36.7	32.5	32.5	18.7	39.2	37.9	39.3	20.8	36.7	34.5	35.5
Hens	do	33.0	33.1	31.7	21.8	34.1	32.9	33.3	22.0	34.3	34.5	35.6
Salmon, canned, red	do	30.4	29.5	29.2	---	37.0	35.0	36.2	---	30.5	30.8	30.7
Milk, fresh	Quart	15.8	15.8	15.8	8.0	12.0	12.0	12.0	12.5	17.7	20.0	19.0
Milk, evaporated	15-16 oz. can	12.9	13.0	13.0	---	11.6	11.6	11.6	---	12.8	13.0	12.9
Butter	Pound	54.9	58.6	56.1	42.3	55.8	57.9	54.1	43.8	60.0	61.4	60.7
Oleomargarine	do	32.5	33.3	33.3	---	28.9	30.7	30.6	---	29.1	31.0	30.0
Nut margarine	do	28.8	30.6	30.2	---	26.6	29.6	29.6	---	28.4	28.6	29.0
Cheese	do	35.5	34.5	33.3	20.5	37.1	36.3	35.8	22.5	35.4	35.7	34.5
Lard	do	18.0	19.9	19.9	15.2	14.6	14.7	14.3	15.3	17.8	13.8	18.1
Vegetable lard substitute	do	18.2	18.2	17.8	---	23.0	25.3	25.4	---	21.8	23.4	23.2
Eggs, strictly fresh	Dozen	26.9	35.0	28.3	20.0	31.0	46.6	29.2	30.0	36.8	52.7	31.0
Bread	Pound	7.2	7.0	7.0	5.1	8.4	8.5	8.5	6.5	10.2	10.1	10.1
Flour	do	5.0	4.7	4.8	3.3	4.7	4.4	4.3	3.8	5.7	5.4	5.4
Corn meal	do	3.6	4.2	4.2	2.6	3.1	3.5	3.6	2.6	3.3	3.8	3.8
Rolled oats	do	8.7	8.9	9.0	---	7.6	7.3	7.3	---	9.6	9.6	9.1
Corn flakes	8-oz. pkg.	9.7	9.7	9.7	---	9.2	8.9	8.8	---	9.7	9.7	9.7
Wheat cereal	28-oz. pkg.	24.1	24.1	24.1	---	24.9	24.4	24.2	---	24.3	24.8	25.2
Macaroni	Pound	20.2	19.2	19.1	---	18.5	18.5	18.5	---	19.5	19.9	19.8
Rice	do	7.7	8.2	8.1	9.2	10.1	10.7	10.8	6.6	8.7	8.9	9.0
Beans, navy	do	10.5	10.3	10.3	---	11.7	9.1	8.8	---	11.7	11.3	11.0
Potatoes	do	3.2	3.9	4.1	1.3	1.6	2.3	2.1	2.3	3.0	3.7	3.9
Onions	do	5.7	6.1	5.7	---	5.1	5.8	5.4	---	6.7	7.8	6.8
Cabbage	do	4.8	5.4	4.1	---	6.9	4.7	6.3	---	4.5	5.5	5.3
Beans, baked	No. 2 can	13.5	13.0	12.8	---	13.5	13.2	13.1	---	11.9	12.0	12.0
Corn, canned	do	13.9	15.2	15.2	---	13.4	13.6	13.6	---	16.4	16.3	17.6
Peas, canned	do	18.4	18.1	18.1	---	15.4	16.2	16.2	---	16.4	18.0	18.0
Tomatoes, canned	do	11.6	12.0	12.2	---	13.5	14.2	14.2	---	11.7	11.3	11.0
Sugar, granulated	Pound	9.7	10.0	10.0	5.8	10.9	10.6	10.6	5.9	10.3	10.8	10.8
Tea	do	70.2	74.5	74.5	60.0	77.2	79.6	79.5	60.0	84.0	89.0	89.0
Coffee	do	34.2	34.9	36.3	31.3	38.4	39.5	42.6	34.5	40.1	40.0	42.0
Prunes	do	19.9	18.0	18.1	---	20.8	20.1	20.0	---	20.6	18.6	18.3
Raisins	do	19.1	16.0	16.0	---	19.2	17.4	17.4	---	20.3	17.5	17.8
Bananas	Dozen	27.7	28.5	31.8	---	29.7	31.4	35.7	---	25.6	31.7	34.3
Oranges	do	44.9	38.8	38.8	---	47.2	36.7	36.7	---	32.8	24.4	25.0

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

ARTI

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Fla.	Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
	Mar. 15—		Feb. 15, 1924		Mar. 15—		Feb. 15, 1924		Mar. 15—		Feb. 15, 1924		Mar. 15—		Feb. 15, 1924		Mar. 15—		Feb. 15, 1924	
	1913	1923	1913	1923	1913	1923	1913	1923	1913	1923	1913	1923	1913	1923	1913	1923	1913	1923	1913	1923
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
37.0	22.8	34.6	37.5	37.1	24.4	32.3	33.6	32.9	22.8	33.0	34.6	34.8	21.8	30.4	31.5	31.5	35.2	52.9	54.4	54.9
30.8	20.2	20.2	30.7	30.8	19.4	28.8	29.0	28.0	20.4	27.2	28.7	28.9	18.9	27.2	27.5	27.8	28.6	43.7	44.4	43.3
28.5	17.7	23.5	25.6	25.5	18.4	26.1	26.3	25.2	19.0	28.1	28.1	27.9	17.9	23.3	23.7	23.7	19.6	25.6	27.6	27.8
18.2	14.7	17.2	18.4	19.0	15.3	19.5	18.8	18.1	16.0	17.8	19.3	19.4	15.3	17.4	17.5	18.0	16.8	20.3	21.3	21.6
10.6	11.4	10.7	11.5	11.6	12.0	14.1	14.8	15.2	12.7	12.8	14.1	14.5	11.9	13.5	13.5	13.8	-----	14.6	15.5	15.3
28.0	19.2	24.7	22.7	23.4	20.0	29.1	27.6	25.8	24.4	36.4	35.0	36.5	19.6	22.7	22.3	22.5	19.2	28.3	26.0	26.1
32.5	28.4	41.5	39.5	38.8	34.0	41.5	38.5	37.1	33.8	48.9	47.1	46.4	27.8	33.9	29.6	29.7	22.6	33.8	31.4	31.1
44.0	27.9	45.0	44.8	45.0	28.8	45.9	45.3	44.7	34.2	57.6	58.2	57.1	27.9	41.0	40.3	40.3	27.8	39.6	37.7	37.4
35.5	17.3	31.8	34.0	33.9	20.8	36.9	35.0	36.3	19.2	33.2	34.2	36.0	18.1	35.0	35.8	37.0	18.6	35.1	35.3	37.4
30.0	17.4	31.6	30.5	31.3	17.9	29.7	27.9	28.1	26.5	40.6	40.8	40.7	23.1	31.9	35.6	36.4	23.2	42.3	41.3	41.2
30.7	-----	32.0	34.1	34.0	-----	32.3	30.8	30.3	-----	37.9	38.0	37.2	-----	28.6	29.4	29.4	-----	29.6	29.8	29.5
19.0	8.7	13.3	13.3	13.3	10.0	15.3	15.7	15.7	10.0	15.0	15.0	15.7	8.8	12.0	13.0	13.0	8.0	13.0	13.0	13.0
12.9	-----	12.5	12.1	12.2	-----	13.4	13.0	13.0	-----	10.8	10.5	10.3	-----	12.1	12.3	12.3	-----	13.9	13.7	13.7
60.7	40.6	58.0	60.5	57.1	43.3	58.5	60.4	56.9	43.5	52.9	58.7	57.8	43.6	58.4	61.7	58.7	42.2	62.1	62.9	62.3
30.0	-----	26.9	27.4	27.6	-----	30.8	31.4	31.4	-----	31.9	33.3	35.5	-----	28.4	31.6	31.7	-----	29.2	28.8	28.8
29.0	-----	27.4	28.1	27.6	-----	28.4	29.6	29.1	-----	29.4	30.1	29.4	-----	25.6	28.0	28.3	-----	22.0	23.3	22.7
34.5	21.5	37.7	37.2	36.7	21.7	38.6	37.6	35.6	19.5	37.5	40.8	39.6	21.7	36.6	34.3	33.2	21.5	38.5	38.4	37.6
18.1	16.2	17.7	17.6	17.1	15.0	19.5	19.2	18.7	17.9	19.3	20.1	19.5	15.3	14.5	15.0	15.0	16.2	17.4	17.9	17.2
23.2	-----	22.9	25.6	25.9	-----	21.4	20.8	20.3	-----	21.8	24.9	25.1	-----	23.1	26.0	26.8	-----	20.2	23.8	23.3
31.0	23.1	32.9	44.8	28.8	20.5	30.9	43.0	27.9	26.0	33.3	36.9	33.3	20.4	26.7	41.5	28.5	29.6	53.1	59.6	43.6
10.1	5.9	8.2	8.3	8.3	6.0	8.2	8.1	8.1	6.2	9.0	9.3	9.3	5.7	8.4	8.4	8.4	5.9	8.4	8.4	8.3
5.4	3.0	4.6	4.3	4.3	3.6	5.3	5.0	5.1	3.6	4.8	4.5	4.5	3.7	5.3	4.9	5.0	3.4	5.4	4.8	4.8
3.8	2.5	4.4	4.5	4.6	2.4	3.0	3.5	3.5	3.1	4.2	4.3	4.3	2.2	2.9	3.1	3.1	3.6	4.6	4.7	4.8
9.1	-----	8.4	8.8	9.0	-----	10.3	9.4	9.4	-----	9.7	9.5	9.6	-----	8.4	8.5	8.3	-----	8.8	8.8	8.8
9.7	-----	10.0	9.9	9.9	-----	9.7	9.8	9.6	-----	9.6	9.8	9.7	-----	9.3	9.3	9.3	-----	9.7	9.8	9.8
25.2	-----	25.6	25.2	24.9	-----	25.9	24.7	24.9	-----	23.5	23.3	23.4	-----	24.1	23.8	23.7	-----	25.3	24.4	24.5
19.8	-----	21.3	21.3	21.7	-----	20.5	20.5	20.2	-----	15.5	15.3	15.1	-----	16.5	16.7	16.6	-----	25.1	24.2	24.5
9.0	8.7	9.4	9.2	9.3	8.3	8.2	8.2	8.1	7.7	9.6	10.2	10.2	8.1	8.3	8.7	8.6	8.5	8.8	9.4	9.3
11.0	-----	12.0	9.7	9.9	-----	12.2	11.0	10.7	-----	9.8	9.4	9.3	-----	10.6	7.9	7.6	-----	11.4	9.7	9.9
3.9	1.5	2.2	2.5	2.5	1.7	2.4	2.9	2.9	1.0	2.3	3.8	3.7	1.4	1.6	2.2	2.2	1.4	2.1	2.6	2.6
6.8	-----	5.7	7.0	7.1	-----	6.4	7.1	6.6	-----	5.5	5.6	5.4	-----	5.3	6.0	5.3	-----	5.4	6.1	6.1
5.3	-----	6.8	5.4	5.9	-----	7.9	6.5	6.2	-----	4.2	6.4	5.8	-----	8.0	6.4	7.1	-----	5.3	4.8	6.3
12.0	-----	14.3	14.0	14.0	-----	13.6	12.8	12.5	-----	13.0	12.7	12.8	-----	11.7	11.6	11.5	-----	15.1	14.3	14.4
17.6	-----	13.8	14.1	14.4	-----	15.7	15.7	15.2	-----	16.3	15.1	15.1	-----	13.1	13.8	13.9	-----	17.3	18.1	18.1
18.0	-----	15.5	16.5	16.6	-----	18.3	18.0	18.5	-----	18.5	17.4	17.3	-----	15.4	16.7	16.7	-----	20.6	21.4	21.4
11.0	-----	13.5	13.9	13.6	-----	13.5	13.0	13.1	-----	15.4	14.3	14.2	-----	11.2	12.1	12.2	-----	20.6	20.4	20.4
10.8	5.6	10.6	10.6	10.6	5.7	10.9	11.2	11.3	5.2	10.7	10.4	10.3	5.1	10.2	10.4	10.6	5.6	10.9	10.6	10.6
80.0	54.0	79.2	80.9	80.4	50.0	91.4	86.3	88.8	54.5	70.1	69.1	68.1	62.5	71.0	72.8	72.8	45.0	56.4	58.9	58.9
42.0	27.8	39.4	40.7	43.9	30.8	41.2	42.2	43.8	36.3	39.0	43.5	45.7	27.5	36.1	36.5	39.0	32.0	39.2	40.1	43.2
18.3	-----	20.3	17.3	17.8	-----	20.6	17.2	17.6	-----	19.4	17.6	17.9	-----	20.1	18.3	17.8	-----	19.0	17.5	16.6
17.8	-----	20.6	17.0	16.8	-----	20.7	19.0	18.5	-----	17.6	14.5	14.9	-----	18.4	14.9	14.9	-----	18.2	15.1	14.9
34.3	-----	13.0	14.0	13.6	-----	10.2	11.4	11.5	-----	11.5	12.2	12.2	-----	38.6	38.3	41.7	-----	10.4	43.3	43.3
25.0	-----	47.7	44.1	43.7	-----	53.3	37.8	40.2	-----	33.2	35.9	32.8	-----	41.7	31.5	31.5	-----	49.5	37.1	35.5

cities

¹ No. 2½ can.

³ No. 3 can.

⁴ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,
		1913	1923	1924	1924	1913	1923	1924	1924	1913	1923	1924	1924
Sirloin steak	Pound	Cts. 22.1	Cts. 31.0	Cts. 32.9	Cts. 32.8	Cts. 21.5	Cts. 35.6	Cts. 37.1	Cts. 36.9	Cts. 20.0	Cts. 30.8	Cts. 29.4	Cts. 29.4
Round steak	do	18.4	27.2	28.3	27.9	20.0	30.9	32.2	32.0	18.5	25.3	25.5	25.8
Rib roast	do	18.7	22.5	23.8	23.4	17.8	26.6	27.3	27.6	18.2	23.7	23.3	23.8
Chuck roast	do	14.4	17.5	17.7	18.1	15.5	21.2	22.4	22.4	15.0	18.4	19.1	19.0
Plate beef	do	11.4	12.6	14.2	13.8	11.3	12.6	13.1	12.9	9.7	9.3	10.5	10.5
Pork chops	do	20.7	22.5	22.1	22.0	18.8	26.8	24.4	25.5	17.8	26.1	25.1	25.3
Bacon, sliced	do	29.3	37.7	34.3	33.8	27.3	40.4	38.2	37.2	25.0	42.5	38.1	38.1
Ham, sliced	do	26.4	44.2	42.6	42.1	26.8	43.5	43.3	42.5	27.5	46.8	41.9	42.5
Lamb, leg of	do	20.4	35.2	34.5	34.4	20.0	36.2	35.7	37.2	15.7	32.6	33.3	36.1
Hens	do	19.6	29.2	28.1	29.2	21.8	35.8	32.8	34.7	19.5	31.9	30.6	32.0
Salmon, canned, red	do		36.8	36.2	35.1		33.2	34.4	34.1		37.1	35.9	36.9
Milk, fresh	Quart	10.0	15.0	14.7	14.7	7.0	10.0	11.0	11.0	7.0	11.0	12.0	12.0
Milk, evaporated	15-16 oz. can		12.4	13.0	13.0		11.6	11.6	11.5		12.4	12.7	12.7
Butter	Pound	42.1	57.1	58.6	57.2	39.6	55.5	57.4	53.9	39.0	53.6	58.6	53.7
Oleomargarine	do		28.3	28.6	29.5		26.7	28.5	28.2		27.3	28.2	28.8
Nut margarine	do		24.7	25.0	24.6		25.3	27.7	27.7		25.4	26.6	26.7
Cheese	do	21.3	35.3	33.9	33.2	22.0	35.8	35.6	35.3	20.3	35.7	35.7	35.4
Lard	do	15.4	16.2	16.5	15.7	15.3	17.7	18.7	18.3	15.3	17.1	17.5	17.1
Vegetable lard substitute	do		21.9	24.1	23.9		23.1	25.4	25.4		24.0	27.2	27.3
Eggs, strictly fresh	Dozen	21.9	30.8	45.0	30.6	23.2	34.0	47.7	28.4	22.4	34.1	42.1	28.4
Bread	Pound	6.0	9.0	9.0	9.0	5.6	8.9	9.2	9.2	5.6	9.0	9.0	8.9
Flour	do	3.6	5.5	5.3	5.2	3.1	4.3	4.2	4.1	2.9	4.6	4.3	4.3
Corn meal	do	2.0	2.9	3.5	3.6	3.3	3.8	4.5	4.4	2.4	4.0	4.3	4.4
Rolled oats	do		9.2	9.5	9.4		7.0	7.6	7.7		8.8	8.6	8.6
Corn flakes	8-oz. pkg		9.6	10.1	9.8		9.3	9.4	9.2		10.2	9.9	10.1
Wheat cereal	28-oz. pkg		23.6	24.4	24.9		24.5	24.2	23.9		24.8	24.2	24.2
Macaroni	Pound		17.8	18.7	18.7		17.5	17.8	17.9		17.7	17.7	17.8
Rice	do	7.5	8.0	8.7	8.8	9.0	9.9	10.4	10.5	9.1	9.3	9.7	10.0
Beans, navy	do		11.8	9.8	9.7		11.5	9.5	9.5		11.9	9.6	9.5
Potatoes	do	1.6	2.5	3.2	3.1	1.2	1.4	2.3	2.2	1.0	1.6	1.9	1.9
Onions	do		4.8	5.8	5.7		5.4	6.2	6.1		4.9	6.1	6.2
Cabbage	do		6.8	4.9	4.9		6.8	6.0	6.5		4.6	3.9	5.4
Beans, baked	No. 2 can		13.0	13.0	13.3		11.6	12.0	12.0		14.2	13.9	13.9
Corn, canned	do		14.7	14.9	14.5		15.4	15.7	15.8		13.7	13.9	13.7
Peas, canned	do		18.2	18.1	17.8		15.3	16.3	16.5		15.8	16.4	16.5
Tomatoes, canned	do		13.0	12.8	12.8		13.6	14.0	14.0		14.9	14.7	14.7
Sugar, granulated	Pound	5.5	10.3	10.7	10.7	5.4	9.7	10.0	10.2	5.6	10.4	10.4	10.5
Tea	do	63.8	83.4	84.6	83.8	50.0	70.1	70.2	71.4	45.0	65.5	65.3	65.3
Coffee	do	27.5	37.5	38.9	42.1	27.5	35.1	35.9	37.7	30.8	41.6	42.9	44.7
Prunes	do		20.0	18.5	18.3		20.0	18.9	18.7		21.9	18.5	18.7
Raisins	do		19.5	16.5	16.9		17.9	15.4	15.2		18.8	16.4	16.1
Bananas	Dozen		33.9	35.5	36.7		10.4	12.0	13.0		12.5	14.0	14.2
Oranges	do		44.9	36.2	36.9		50.5	42.8	38.3		50.9	42.2	40.2

¹ Whole.² No. 3 can.

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Mobile, Ala.		Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924
		1913	1923			1913	1923			1913	1923			1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
30.0	31.5	26.2	41.5	44.2	44.1	30.4	47.8	51.0	50.4	20.0	31.4	32.3	33.9	25.4	39.9	41.2	41.1
29.2	30.3	25.6	38.1	42.7	42.1	26.6	39.1	42.2	41.7	17.5	28.0	29.0	29.5	23.8	38.1	40.4	40.0
23.5	25.0	20.0	33.4	34.2	34.6	23.0	33.5	34.8	34.4	19.6	27.1	28.4	30.0	21.7	34.9	36.6	35.8
19.2	20.2	16.8	20.8	23.6	23.6	18.0	24.4	25.6	24.4	13.0	20.0	20.9	21.6	15.8	21.2	22.9	22.8
15.5	15.5	12.0	11.8	13.2	12.8	-----	14.2	13.8	13.8	11.1	16.1	17.3	16.8	14.5	18.2	18.2	18.3
28.3	28.8	21.2	28.8	26.4	25.8	21.2	27.5	26.6	26.6	21.1	30.0	28.2	27.9	21.3	31.3	28.8	28.9
37.7	36.6	23.4	38.1	38.3	37.5	26.7	40.2	37.4	37.4	29.3	40.8	37.2	36.3	23.6	38.2	35.5	34.7
41.3	40.7	19.8	27.9	25.8	26.2	30.0	51.3	50.6	49.9	26.0	41.5	40.0	40.6	28.5	47.9	49.1	47.2
39.0	37.0	21.2	36.7	36.9	38.3	19.0	37.4	36.2	38.0	20.5	39.7	38.0	41.1	17.3	34.8	34.9	36.3
35.0	35.0	23.2	38.4	37.1	37.6	23.0	39.6	39.1	39.7	23.2	37.8	35.3	37.5	21.1	36.7	36.0	37.0
28.8	28.5	-----	29.9	28.1	27.9	-----	32.2	33.2	32.9	-----	37.5	41.5	41.5	-----	28.1	28.4	28.6
20.0	20.0	9.0	16.0	15.5	15.5	9.0	15.0	15.0	15.0	10.0	14.0	15.0	15.0	9.0	15.0	14.0	14.0
12.6	12.8	-----	11.9	12.0	11.9	-----	12.3	12.4	12.3	-----	11.8	11.9	11.7	-----	11.6	11.8	11.7
61.7	61.0	43.8	58.7	63.8	59.2	39.0	57.5	60.4	58.7	41.9	58.5	60.7	59.4	41.2	56.8	60.8	56.1
31.7	33.4	-----	29.1	31.5	31.4	-----	31.0	33.3	33.3	-----	30.1	31.1	31.0	-----	29.3	30.6	30.8
28.6	29.0	-----	26.7	29.1	28.9	-----	27.3	30.0	30.0	-----	28.4	28.8	28.6	-----	26.1	28.3	28.4
36.8	35.6	24.5	38.9	40.9	41.2	22.0	37.7	38.3	37.2	21.4	36.3	35.6	35.0	19.8	37.6	38.5	37.8
17.9	17.1	15.7	17.3	18.4	18.3	15.3	17.1	17.9	17.7	14.6	16.8	16.9	16.5	16.0	17.8	19.0	18.3
19.2	19.5	-----	22.2	24.7	24.9	-----	21.8	24.3	24.3	-----	23.4	21.1	21.2	-----	22.8	25.6	25.7
42.7	27.5	35.0	50.3	63.6	44.9	32.0	52.4	61.5	48.0	23.4	32.3	42.7	30.2	31.8	48.9	61.5	42.6
8.8	8.8	5.6	8.5	8.5	8.6	6.0	7.9	8.3	8.3	5.1	7.7	7.7	7.7	6.0	9.7	9.4	9.5
5.1	5.1	3.6	4.7	4.6	4.6	3.1	4.8	4.5	4.6	3.8	5.8	5.4	5.4	3.2	4.9	4.7	4.7
3.8	3.7	3.6	5.9	6.6	6.8	3.2	6.1	6.2	6.2	2.6	3.2	3.7	3.7	3.4	5.6	5.7	5.6
8.5	8.4	-----	8.2	8.1	8.1	-----	8.9	9.0	9.0	-----	8.8	8.5	8.6	-----	8.2	8.5	8.5
9.3	9.3	-----	8.9	8.9	8.9	-----	9.6	9.6	9.6	-----	9.5	9.6	9.3	-----	8.7	8.8	8.8
23.5	23.5	-----	24.1	23.5	23.6	-----	24.1	23.8	24.0	-----	23.9	23.9	23.9	-----	23.1	22.6	22.5
19.7	19.4	-----	21.4	20.9	20.9	-----	22.3	22.6	22.5	-----	8.8	9.6	9.6	-----	20.3	20.2	20.4
8.7	8.6	9.0	9.1	9.8	9.8	9.3	9.7	10.4	10.4	7.4	8.6	9.3	9.2	8.0	9.3	9.5	9.5
10.7	10.2	-----	10.9	16.1	9.9	-----	11.6	10.0	9.8	-----	10.8	9.5	9.3	-----	11.5	11.4	11.2
3.2	3.1	2.4	3.0	3.5	3.5	1.6	2.6	3.0	3.0	1.9	2.5	3.4	3.3	2.3	3.3	3.6	3.6
5.6	5.4	-----	6.0	6.5	6.3	-----	6.0	6.7	6.0	-----	4.8	5.1	5.1	-----	5.5	6.1	6.0
6.1	5.5	-----	6.4	6.3	8.2	-----	7.1	5.8	7.4	-----	4.2	5.1	4.6	-----	5.5	4.9	6.4
12.1	12.1	-----	10.8	11.4	11.3	-----	12.5	12.1	11.9	-----	12.9	12.5	12.4	-----	11.7	11.9	11.9
15.2	15.8	-----	14.1	15.1	15.1	-----	17.7	18.1	18.3	-----	13.5	13.4	13.7	-----	15.1	15.4	15.6
16.1	16.1	-----	16.5	17.7	17.7	-----	21.2	20.3	20.1	-----	17.5	16.6	16.9	-----	16.5	17.3	17.8
11.9	11.6	-----	12.0	12.1	12.0	-----	21.8	21.8	21.8	-----	12.0	11.6	11.6	-----	11.3	11.1	11.1
10.5	10.4	5.2	9.7	10.0	10.1	5.1	10.0	10.1	10.2	5.2	9.7	9.7	9.6	4.8	9.6	9.5	9.6
74.0	74.9	53.8	52.4	58.3	58.3	55.0	57.3	57.6	57.7	62.1	71.7	69.6	70.9	43.3	52.5	59.4	59.4
39.0	40.5	29.3	35.4	36.9	38.9	33.8	41.4	41.0	42.7	26.3	32.8	34.1	35.4	27.5	35.4	36.3	38.7
17.6	16.7	-----	17.2	16.1	16.3	-----	19.7	16.6	16.6	-----	20.1	19.1	18.2	-----	17.6	16.3	15.8
16.4	16.4	-----	15.9	15.3	15.3	-----	17.5	15.4	15.4	-----	18.9	15.7	15.4	-----	16.5	15.6	15.7
29.4	29.4	-----	37.9	38.0	38.0	-----	33.1	34.3	33.8	-----	20.0	21.0	22.0	-----	44.2	43.6	42.2
34.0	31.5	-----	49.9	41.0	37.7	-----	51.7	39.5	38.2	-----	51.3	37.0	38.2	-----	54.8	46.5	43.9

*Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Mar.	Feb.	Mar.	Mar. 15—		Mar.	Feb.	Mar.	Feb.	Mar.
		15, 1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924	15, 1923	15, 1924	15, 1924
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	37.3	40.9	40.9	24.5	33.0	35.9	35.6	30.1	32.1	32.1
Round steak	do.	31.0	34.4	34.2	20.8	29.6	31.8	31.4	29.3	29.6	29.8
Rib roast	do.	30.5	33.0	33.5	17.9	24.5	25.6	25.5	23.0	23.1	23.1
Chuck roast	do.	18.9	21.5	21.3	15.5	18.6	19.9	20.1	18.7	19.7	19.9
Plate beef	do.	13.7	14.5	14.7	10.3	10.3	10.4	10.5	12.9	12.8	12.8
Pork chops	do.	27.9	25.7	25.5	18.2	25.8	24.6	25.2	26.3	24.1	25.1
Bacon, sliced	do.	36.0	32.5	31.6	27.0	45.6	43.1	42.2	40.4	39.3	39.0
Ham, sliced	do.	38.0	38.6	37.0	29.0	48.5	46.9	45.9	44.6	44.6	44.3
Lamb, leg of	do.	38.5	37.8	39.4	18.0	34.9	36.2	36.7	33.7	33.9	34.6
Hens	do.	37.6	35.3	35.3	18.5	31.2	30.4	31.1	31.5	30.6	31.8
Salmon, canned, red	do.	29.2	28.6	28.7		33.6	33.2	32.9	32.5	32.1	32.1
Milk, fresh	Quart	17.0	17.0	17.0	8.1	11.0	12.2	12.2	10.8	12.4	12.2
Milk, evaporated	15-16 oz. can	11.3	11.7	11.6		11.9	12.0	12.1	11.9	12.0	12.0
Butter	Pound	57.8	61.7	61.3	39.6	54.0	56.6	54.0	54.0	57.7	53.6
Oleomargarine	do.	30.0	31.7	31.7		29.3	29.7	29.2	29.4	31.4	31.1
Nut margarine	do.	27.2	27.4	27.0		27.9	29.1	28.6	27.3	29.3	29.3
Cheese	do.	33.6	33.2	32.7	22.9	36.4	35.4	35.2	37.5	38.1	36.7
Lard	do.	16.4	16.4	15.9	17.3	18.9	19.0	19.2	17.1	18.5	18.2
Vegetable lard substitute	do.	16.8	18.0	19.4		23.3	26.1	26.2	24.2	25.6	26.3
Eggs, strictly fresh	Dozen	32.5	47.5	35.8	20.5	32.6	41.5	28.3	30.2	48.5	29.5
Bread	Pound	7.9	7.8	7.9	5.2	9.8	9.9	9.6	8.0	8.6	8.6
Flour	do.	4.8	4.5	4.4	2.9	4.2	3.8	3.9	4.7	4.5	4.6
Corn meal	do.	3.6	4.0	4.0	2.3	3.6	4.1	4.0	3.7	4.0	4.0
Rolled oats	do.	7.9	8.0	8.0		9.9	10.5	10.6	8.8	9.0	9.0
Corn flakes	8-oz. pkg	9.4	9.2	9.0		10.0	9.7	9.7	10.0	9.9	10.3
Wheat cereal	28-oz. pkg	24.0	23.3	23.3		24.2	24.4	24.4	26.3	25.2	25.2
Macaroni	Pound	20.1	20.4	19.6		20.5	20.1	20.2	19.4	19.5	19.2
Rice	do.	9.6	10.0	10.0	8.5	9.2	9.1	9.3	9.5	9.5	9.8
Beans, navy	do.	10.8	9.7	9.5		11.9	10.7	10.1	12.4	9.4	9.1
Potatoes	do.	2.2	3.1	3.0	1.3	1.7	2.3	2.5	1.7	2.3	2.3
Onions	do.	5.8	6.6	6.4		4.9	6.1	6.2	6.0	7.5	7.0
Cabbage	do.	6.1	5.6	6.4		6.6	5.2	5.9	7.8	4.8	6.0
Beans, baked	No. 2 can	10.2	9.7	10.1		15.1	14.8	14.6	13.4	12.8	12.9
Corn, canned	do.	15.2	16.2	16.1		15.8	17.0	16.6	14.5	14.2	13.8
Peas, canned	do.	18.4	18.8	19.3		16.9	16.5	16.5	17.1	17.6	17.6
Tomatoes, canned	do.	11.7	11.0	11.3		13.9	14.1	14.1	14.2	14.0	14.1
Sugar, granulated	Pound	9.3	9.7	9.8	5.7	10.1	10.3	10.5	10.7	10.8	10.9
Tea	do.	76.4	79.9	81.5	56.0	73.9	76.9	76.9	61.1	62.5	62.5
Coffee	do.	38.6	37.3	37.5	30.0	40.9	41.3	44.1	37.2	37.2	39.6
Prunes	do.	19.5	16.2	16.2		20.3	18.8	18.6	21.8	20.6	21.2
Raisins	do.	17.8	15.5	15.5		20.0	18.3	17.6	20.1	16.8	16.6
Bananas	Dozen	33.2	38.3	36.1		12.4	13.6	13.7	10.9	13.2	13.3
Oranges	do.	41.6	34.8	34.5		50.6	39.3	37.6	47.0	42.4	40.1

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.				Portland, Oreg.				Providence, R. I.			
Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15,	Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15—		Feb. 15,	Mar. 15,	
1913	1923	1924	1924	1913	1923	1924	1924	1923	1924	1924	1913	1923	1924	1924	1913	1923	1924	1924	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
28.6	147.1	149.5	149.1	26.0	41.8	42.4	42.6	155.8	156.9	155.8	22.4	27.9	28.6	29.1	139.2	164.7	168.8	169.1	
23.5	36.4	38.2	38.3	22.0	34.8	34.6	35.0	43.6	44.0	43.8	20.0	24.5	25.6	25.7	29.8	46.0	47.5	47.0	
21.4	31.7	33.7	33.2	21.8	31.2	31.9	32.3	28.8	29.4	29.4	18.7	23.5	24.2	24.8	24.4	35.2	36.5	37.0	
16.5	19.6	21.0	20.9	16.2	21.1	22.0	22.0	18.4	19.2	19.6	15.8	16.7	17.1	17.7	18.4	25.4	26.9	27.1	
11.4	9.9	10.8	11.1	11.6	11.4	11.5	11.6	13.5	15.6	15.2	13.0	12.3	12.5	12.7	-----	15.7	18.6	18.2	
20.3	30.0	29.3	30.0	21.3	29.4	28.4	29.4	29.1	26.6	26.8	20.2	30.8	27.6	27.2	20.0	30.7	29.8	30.2	
23.8	36.5	34.7	34.5	28.1	41.0	40.3	39.8	37.5	35.4	35.8	28.1	43.9	41.4	40.7	21.8	36.6	35.4	34.7	
29.7	51.5	48.7	47.3	28.8	53.7	52.8	51.4	47.0	46.8	45.4	29.7	46.6	46.6	46.2	28.5	52.8	50.9	51.6	
18.6	37.7	38.0	38.4	22.5	37.9	38.1	39.2	36.1	34.3	37.3	17.6	34.7	33.5	34.4	19.3	39.4	38.6	41.8	
21.8	38.3	38.1	38.4	26.4	42.1	41.7	42.1	40.6	39.1	39.6	21.5	31.7	33.5	32.4	23.0	40.6	40.5	40.4	
8.0	27.2	26.2	26.1	-----	28.4	28.0	27.7	28.6	27.7	27.6	-----	36.4	36.7	36.0	-----	31.3	30.3	30.3	
12.0	12.0	12.0	12.0	8.8	14.0	14.0	14.0	14.0	14.0	14.0	9.3	12.6	11.8	11.8	9.0	15.0	14.0	13.0	
12.3	12.2	12.2	12.1	-----	11.9	11.9	11.8	13.4	13.4	13.6	-----	12.0	11.4	11.0	-----	12.5	12.4	12.4	
47.5	63.1	64.7	62.2	43.4	59.3	62.6	59.5	62.0	64.1	62.3	44.5	50.3	55.1	55.6	42.2	59.1	60.4	58.9	
29.2	31.4	31.6	-----	-----	28.7	30.8	31.0	30.9	31.7	31.9	-----	28.8	29.8	29.8	-----	29.1	29.4	29.1	
25.0	27.8	29.6	28.3	-----	27.8	27.8	28.7	27.9	28.2	28.2	-----	28.3	29.7	29.2	-----	28.1	29.1	28.9	
15.0	39.1	38.0	38.0	24.5	38.4	39.1	39.0	39.6	39.5	38.4	20.5	37.9	37.1	37.9	22.3	37.2	36.5	36.4	
22.4	15.8	16.6	16.0	15.1	15.6	17.3	16.7	18.0	18.0	17.5	17.9	19.7	19.6	19.3	15.2	17.0	17.5	17.3	
25.4	22.4	24.6	24.6	-----	23.1	24.8	24.8	22.2	23.5	23.6	-----	25.0	27.6	27.7	-----	23.2	25.5	25.5	
4.8	41.0	54.3	36.6	25.4	42.1	55.9	37.6	55.1	58.8	42.6	24.5	29.2	34.6	26.8	31.8	54.1	66.2	50.9	
3.2	8.5	8.5	8.5	5.4	8.5	8.5	8.5	9.3	9.3	9.3	5.6	9.4	9.2	9.2	6.0	8.8	8.7	8.7	
2.8	4.8	4.6	4.6	3.1	4.6	4.4	4.4	4.9	4.5	4.5	2.9	4.6	4.0	4.0	3.4	5.2	5.0	5.0	
8.3	3.8	4.2	4.2	2.7	3.9	4.5	4.6	4.4	4.7	4.7	3.4	3.6	4.1	4.0	2.9	4.0	4.3	4.3	
9.1	8.2	8.2	8.2	-----	8.9	9.0	9.0	6.5	6.9	6.9	-----	9.4	9.4	9.3	-----	9.6	9.1	9.1	
24.1	9.1	8.9	8.8	-----	9.5	9.5	9.5	9.7	9.7	9.7	-----	11.6	11.3	11.4	-----	9.9	9.7	9.7	
21.4	24.1	23.7	23.7	-----	24.8	24.1	24.3	24.6	24.7	24.6	-----	27.4	25.9	25.9	-----	25.0	24.3	24.2	
10.3	21.4	20.5	20.3	-----	20.3	20.6	20.8	24.3	24.2	23.7	-----	18.4	18.1	18.1	-----	22.3	23.0	23.4	
11.8	10.3	10.6	10.7	9.2	9.6	10.3	10.2	10.5	10.7	10.6	8.6	9.5	10.0	9.8	9.3	9.7	9.5	9.5	
2.7	11.8	10.3	9.9	-----	11.4	9.6	9.4	11.1	9.9	10.1	-----	10.2	9.8	9.8	-----	11.0	10.1	10.2	
5.0	2.7	3.3	3.2	1.5	2.3	2.7	2.6	2.3	2.2	2.7	0.7	1.3	2.2	2.2	1.6	2.4	2.8	2.8	
7.3	5.0	4.9	5.1	-----	5.6	6.1	5.9	5.8	5.8	5.9	-----	4.2	4.3	3.9	-----	5.7	5.9	6.0	
11.4	7.3	5.1	7.0	-----	6.8	5.3	7.1	4.4	3.5	5.1	-----	5.4	6.6	6.4	-----	8.5	5.4	7.1	
15.0	11.4	11.2	11.2	-----	12.6	12.4	12.5	15.4	15.1	15.2	-----	16.6	15.7	14.9	-----	12.6	12.1	12.1	
16.4	15.0	14.9	15.0	-----	13.8	15.5	15.9	16.4	16.7	16.8	-----	17.1	18.5	19.1	-----	17.7	17.3	17.4	
12.3	16.4	16.4	16.2	-----	16.1	17.3	17.6	19.7	20.1	20.2	-----	16.8	18.2	18.8	-----	20.1	19.9	19.8	
4.9	12.3	11.8	11.8	-----	12.5	13.3	13.1	22.8	24.1	24.6	-----	21.4	21.9	21.7	-----	13.8	12.4	12.5	
54.0	9.6	9.7	9.8	5.6	9.9	10.4	10.4	10.5	10.4	10.3	6.3	10.3	10.5	10.5	5.0	10.1	10.2	10.3	
25.0	59.2	60.4	60.4	58.0	77.2	78.4	75.5	58.1	60.5	60.5	55.0	64.6	71.1	70.8	48.3	61.2	58.7	58.4	
17.2	32.7	31.7	34.1	30.0	37.7	30.2	41.0	40.8	42.2	45.3	35.0	37.1	41.2	43.2	30.0	41.7	42.9	46.7	
17.5	17.2	15.7	15.7	-----	20.6	18.4	18.9	18.8	16.6	16.5	-----	14.3	10.5	10.3	-----	20.2	18.3	18.4	
33.1	17.5	15.0	14.8	-----	18.3	15.1	14.7	17.9	14.5	14.1	-----	18.6	14.5	14.5	-----	17.8	15.3	15.1	
49.3	33.1	35.0	33.7	-----	43.2	44.0	43.5	41.5	42.4	42.1	-----	15.8	16.3	16.4	-----	33.5	34.7	34.5	
17.5	49.3	38.2	37.5	-----	50.8	43.3	41.8	52.6	39.8	38.5	-----	44.0	34.4	36.7	-----	53.8	43.6	41.2	

No. 3 can.

No. 2½ can.

Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Richmond, Va.				Rochester, N. Y.				St. Louis, Mo.			
		Mar. 15—		Feb.	Mar.	Mar.	Feb.	Mar.		Mar. 15—		Feb.	Mar.
				15,	15,	15,	15,	15,				15,	15,
		1913	1923	1924	1924	1923	1924	1924		1913	1923	1924	1924
Sirloin steak.....	Pound	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.		Cts.	Cts.	Cts.	Cts.
Round steak.....	do	22.2	37.6	39.2	38.7	35.9	39.2	39.2		22.8	33.8	34.9	35.0
Rib roast.....	do	19.6	32.7	34.5	35.1	31.1	32.9	32.9		20.2	31.4	32.6	32.5
Chuck roast.....	do	18.9	29.4	30.3	30.3	27.6	29.4	29.0		18.4	26.2	28.5	28.2
Plate beef.....	do	15.3	21.9	22.1	21.9	22.0	23.0	22.8		15.4	18.4	18.9	19.1
	do	11.4	15.5	15.5	15.6	11.8	12.3	12.1		10.7	12.9	13.1	13.1
Pork chops.....	do	19.4	28.4	27.2	27.3	30.3	28.7	28.2		18.0	23.9	23.3	23.5
Bacon, sliced.....	do	23.6	35.4	30.8	30.5	35.1	33.3	32.8		23.8	37.9	36.2	35.8
Ham, sliced.....	do	24.0	39.4	37.5	36.8	43.3	45.1	43.8		26.7	43.1	42.7	42.6
Lamb, leg of.....	do	19.3	42.0	42.5	43.6	37.1	35.2	36.6		17.1	34.8	34.3	35.4
Hens.....	do	22.0	35.9	34.5	35.8	40.8	38.7	39.9		18.6	31.8	31.6	32.5
Salmon, canned, red.....	do		30.5	31.6	31.6	29.1	28.8	29.0			32.0	32.6	32.4
Milk, fresh.....	Quart.	10.0	14.0	14.0	14.0	13.0	12.5	12.5		8.0	13.0	13.0	13.0
Milk, evaporated.....	15-16 oz. can.		13.3	13.7	13.6	12.1	12.1	12.1			11.5	11.3	11.1
Butter.....	Pound	44.2	65.6	65.9	65.9	58.5	60.9	55.9		41.2	58.2	61.9	59.3
Oleomargarine.....	do		29.6	29.2	30.6	29.9	31.2	31.2			26.9	27.8	27.9
Nut margarine.....	do		27.6	29.6	29.6	26.8	29.1	28.7			24.5	25.2	25.2
Cheese.....	do	22.3	38.0	36.5	36.5	36.7	37.3	37.4		20.3	36.0	35.1	34.0
Lard.....	do	15.0	17.6	17.6	17.1	17.3	17.6	17.2		13.6	14.3	13.8	13.3
Vegetable lard substitute.....	do		22.9	24.7	24.6	20.8	21.8	22.2			22.2	25.0	24.9
Eggs, strictly fresh.....	Dozen	21.8	32.8	49.5	32.9	45.8	57.9	38.3		22.0	32.0	44.6	30.2
Bread.....	Pound	5.3	9.1	8.6	8.6	8.0	8.0	8.1		5.5	8.9	8.9	8.9
Flour.....	do	3.3	5.0	4.5	4.5	4.9	4.5	4.5		3.0	4.2	4.1	4.2
Corn meal.....	do	2.0	4.0	4.5	4.5	4.7	5.0	5.0		2.1	3.0	4.0	3.8
Rolled oats.....	do		9.5	9.0	9.1	7.7	8.4	8.4			8.3	8.4	8.4
Corn flakes.....	8-oz. pkg		9.8	9.6	9.6	9.7	9.5	9.5			9.0	9.0	9.0
Wheat cereal.....	28-oz. pkg		26.2	25.3	25.3	24.2	24.0	24.0			23.5	23.6	23.6
Macaroni.....	Pound		21.8	20.4	20.7	18.9	19.1	19.4			19.6	19.9	20.3
Rice.....	do	9.8	11.0	11.1	11.3	9.5	9.9	10.0		8.6	8.7	9.2	9.2
Beans, navy.....	do		12.0	10.8	10.8	11.1	10.0	10.0			11.4	9.0	8.9
Potatoes.....	do	1.7	2.7	3.4	3.4	1.6	2.1	2.1		1.3	2.0	2.7	2.7
Onions.....	do		6.1	7.3	6.8	5.5	5.7	5.7			5.2	5.6	5.5
Cabbage.....	do		8.3	6.1	7.5	4.4	4.1	5.8			6.4	4.8	4.8
Beans, baked.....	No. 2 can		11.8	11.7	11.6	11.4	11.4	11.2			1.1	11.3	11.3
Corn, canned.....	do		15.8	14.7	14.7	16.6	16.0	16.0			15.2	15.5	15.4
Peas, canned.....	do		19.5	20.4	20.1	19.3	19.3	19.3			16.6	17.4	17.4
Tomatoes, canned.....	do		12.2	11.8	11.8	13.2	13.4	13.7			11.5	12.8	12.8
Sugar, granulated.....	Pound	5.1	10.1	10.2	10.4	9.9	9.9	9.9		5.1	9.9	10.3	10.4
Tea.....	do	56.0	78.2	82.7	83.9	62.4	64.0	63.6		55.0	66.8	70.5	70.7
Coffee.....	do	27.4	38.8	38.3	39.5	36.1	36.0	36.6		24.3	35.5	37.4	39.9
Prunes.....	do		21.9	19.0	19.6	20.0	18.9	19.0			21.6	21.1	20.9
Raisins.....	do		18.6	15.1	15.0	17.3	14.2	14.3			17.5	15.5	15.6
Bananas.....	Dozen		38.5	39.7	40.0	43.9	43.8	44.0			29.6	31.9	34.4
Oranges.....	do		42.9	35.0	35.4	52.3	40.9	39.3			47.0	41.2	40.8

¹ No. 2½ can.

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.			Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Mar. 15, 1923	Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924	Mar. 15, 1923	Feb. 15, 1924	Mar. 15, 1924	Mar. 15—		Feb. 15, 1924	Mar. 15, 1924
			1913	1923			1913	1923						1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
33.1	33.0	32.9	22.1	26.1	28.3	28.0	20.3	29.6	32.0	31.5	30.7	28.8	30.0	22.3	46.3	49.0	49.0
26.3	27.4	26.9	19.3	23.2	24.1	24.2	19.0	26.8	28.8	28.9	25.7	23.3	25.5	18.5	37.0	39.8	39.6
27.0	25.6	25.8	18.5	20.6	20.3	21.0	20.7	28.2	30.2	30.2	23.9	22.3	25.0	18.8	34.7	35.9	35.9
19.0	19.4	19.9	15.0	16.3	16.9	17.3	14.6	17.8	19.9	19.7	15.7	13.6	15.8	14.9	23.9	26.5	26.0
10.4	11.3	11.1	11.4	12.2	11.8	12.1	12.9	13.8	16.4	15.8	13.1	12.1	13.0	10.5	11.0	10.8	10.9
24.8	24.0	24.4	21.7	28.0	25.4	25.6	24.0	34.7	34.0	33.7	26.4	25.4	25.9	19.5	30.1	29.3	29.4
39.4	34.2	35.5	31.7	38.0	34.3	33.9	32.8	50.3	48.7	47.7	33.8	30.8	30.2	24.2	42.4	40.8	40.2
42.9	39.6	39.9	29.3	42.9	40.8	40.8	30.0	52.4	50.8	51.1	36.7	33.6	33.5	27.0	52.3	52.5	52.8
32.8	31.3	33.2	18.2	30.5	29.8	33.1	17.3	33.6	36.8	37.0	39.0	37.0	41.3	20.7	42.2	42.5	44.2
30.3	29.1	30.5	24.7	31.0	30.9	31.5	23.8	40.5	40.9	41.3	31.7	32.8	33.3	22.5	42.2	41.9	42.6
34.4	36.1	35.8	-----	33.5	35.2	35.6	-----	27.9	27.6	27.2	34.8	33.7	34.1	-----	36.3	33.9	33.9
11.0	11.0	11.0	8.7	10.0	10.0	10.0	10.0	13.0	14.0	14.0	18.0	17.5	17.5	8.8	13.0	11.0	11.0
12.2	12.3	12.4	-----	11.3	11.3	11.3	-----	10.8	10.3	10.1	11.9	11.5	11.4	-----	12.3	12.3	12.4
52.6	55.2	52.7	40.6	53.0	53.3	52.0	42.9	53.5	58.8	58.1	60.2	61.5	60.5	40.6	57.8	59.7	58.1
28.8	30.3	30.2	-----	-----	-----	-----	-----	29.3	29.7	29.6	32.4	33.8	33.9	-----	30.7	32.3	32.3
27.6	26.6	26.4	-----	28.1	29.9	29.7	-----	28.3	29.4	29.0	29.3	32.5	32.5	-----	25.5	25.0	25.0
36.4	35.9	35.0	24.2	31.0	31.0	30.7	20.0	37.2	38.3	38.2	35.8	35.7	35.2	18.8	36.1	36.6	36.3
17.7	18.0	17.6	18.7	20.0	18.8	18.5	16.9	19.3	20.9	20.4	17.8	17.7	17.6	15.8	17.7	18.8	18.1
24.0	23.7	23.7	-----	26.7	29.1	29.0	-----	25.4	26.6	26.4	18.8	19.5	19.1	-----	22.6	25.6	25.6
32.9	44.1	26.9	23.1	32.8	35.8	24.6	23.5	30.9	36.4	29.6	36.9	52.0	33.4	26.3	45.3	60.4	42.1
9.4	9.3	9.3	5.9	9.5	9.7	9.8	5.7	9.0	9.1	9.1	8.7	8.1	8.1	5.6	9.0	8.9	9.0
4.8	4.2	4.2	2.5	3.4	3.2	3.2	3.3	5.2	4.8	4.8	5.6	5.3	5.3	3.4	5.3	5.1	5.0
3.5	3.9	3.9	3.4	3.7	3.9	3.9	3.4	4.7	4.7	4.6	2.8	3.4	3.3	-----	5.8	5.6	5.6
9.3	9.9	9.7	-----	9.3	9.0	9.1	-----	9.4	9.5	9.7	8.6	8.5	8.6	-----	9.4	9.7	9.7
9.9	10.0	10.0	-----	11.3	10.9	11.2	-----	10.5	10.7	10.6	9.3	8.9	9.0	-----	10.1	10.1	10.0
25.0	25.0	25.0	-----	25.1	24.9	25.3	-----	24.0	23.0	23.0	23.2	23.4	23.7	-----	26.4	25.8	25.5
18.9	18.7	18.7	-----	19.6	18.7	19.2	-----	14.7	14.5	14.1	17.7	17.5	17.2	-----	22.9	22.9	23.1
9.5	10.1	10.2	8.2	9.0	8.8	8.9	8.5	9.2	9.0	9.3	8.0	8.5	8.6	8.5	9.7	9.9	9.9
11.9	9.9	9.7	-----	10.4	10.4	10.2	-----	9.9	9.9	9.7	12.0	10.4	10.4	-----	11.9	11.7	11.8
1.5	1.7	1.8	0.9	1.2	1.8	1.8	1.2	2.3	3.3	3.3	2.6	3.0	3.1	1.5	2.3	2.5	2.5
4.5	6.9	6.5	-----	3.2	4.7	4.6	-----	3.9	3.7	3.5	6.6	7.0	6.7	-----	6.0	5.8	5.8
5.0	4.6	5.8	-----	3.3	3.9	4.7	-----	-----	-----	-----	4.5	5.8	6.6	-----	9.1	6.0	7.2
14.5	14.0	14.4	-----	16.0	15.5	15.2	-----	14.6	13.8	13.5	12.8	12.4	12.4	-----	12.1	12.3	12.1
14.2	15.4	15.2	-----	13.8	14.4	14.6	-----	16.3	17.1	17.4	14.9	14.4	14.4	-----	16.4	17.3	17.3
16.4	17.2	17.4	-----	15.2	14.9	15.4	-----	17.2	18.1	18.3	16.9	18.5	18.5	-----	17.6	18.2	18.3
14.4	14.4	14.4	-----	12.9	13.0	13.5	-----	14.1	15.3	15.1	11.3	10.7	10.5	-----	13.4	13.2	13.2
10.3	10.8	10.8	6.3	10.7	11.0	11.0	5.3	10.1	10.1	10.1	9.9	10.0	10.0	6.1	9.9	10.2	10.2
67.3	67.9	67.9	65.7	79.7	84.6	82.6	50.0	57.3	59.4	60.4	60.3	66.5	66.8	52.5	60.5	60.3	61.3
40.4	43.5	43.6	35.8	44.8	46.3	48.0	32.0	36.2	39.8	41.9	35.0	35.6	35.9	31.3	39.6	39.4	40.7
21.3	19.8	19.9	-----	18.9	16.4	15.7	-----	18.1	16.5	16.2	19.9	15.5	15.7	-----	18.6	16.5	16.8
19.5	17.4	17.4	-----	18.4	14.9	14.8	-----	17.8	13.7	13.8	17.8	15.2	15.2	-----	18.7	15.6	15.1
12.2	14.7	14.4	-----	15.7	17.6	17.6	-----	32.9	33.6	37.5	34.2	31.7	38.8	-----	32.9	34.4	34.4
57.3	54.2	52.1	-----	44.2	34.1	33.8	-----	44.3	39.1	37.8	41.1	28.6	26.5	-----	51.6	46.1	45.5

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Concluded

Article	Unit	Seattle, Wash.				Springfield, Ill.				Washington, D. C.			
		Mar. 15—		Feb. 15,	Mar. 15,	Mar. 15,	Feb. 15,	Mar. 15,	Mar. 15—	Feb. 15,	Mar. 15,	Mar. 15,	Mar. 15,
		1913	1923	1924	1924	1923	1924	1924					
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	1913	1923	Cts.	Cts.	Cts.
Sirloin steak	Pound	21.8	30.0	31.9	32.4	31.0	32.8	33.7	26.4	41.6	43.5	43.2	
Round steak	do	20.0	25.9	27.2	27.8	29.8	32.4	32.9	23.1	35.0	36.0	36.1	
Rib roast	do	18.2	24.5	25.0	26.2	22.5	22.5	22.5	21.0	33.2	33.3	33.5	
Chuck roast	do	15.0	16.4	17.3	18.0	18.2	19.9	19.9	16.6	22.3	22.8	23.4	
Plate beef	do	11.2	13.1	13.8	13.9	12.2	12.8	12.7	11.7	12.0	12.8	13.1	
Pork chops	do	23.4	33.4	30.9	30.6	24.5	22.8	24.1	21.9	31.2	26.8	27.9	
Bacon, sliced	do	30.0	47.7	45.2	44.8	38.0	36.7	37.3	25.4	38.1	33.4	31.9	
Ham, sliced	do	30.0	49.3	49.6	48.3	42.9	43.3	43.0	28.6	54.5	51.1	52.5	
Lamb, leg of	do	18.2	34.0	33.2	34.6	38.1	37.9	40.7	21.4	39.9	39.9	40.3	
Hens	do	24.0	31.3	33.3	33.7	31.6	32.7	32.3	22.1	41.0	38.8	39.2	
Salmon, canned, red	do		31.0	30.3	30.3	33.5	34.9	34.6		27.8	27.8	27.9	
Milk, fresh	Quart	8.6	13.0	12.0	12.0	11.1	12.5	12.5	9.0	14.0	15.0	15.0	
Milk, evaporated	15-16 oz. can		11.1	10.7	10.7	12.9	12.8	12.9		12.0	12.4	12.4	
Butter	Pound	44.0	51.3	57.0	57.0	57.6	60.7	58.3	44.1	62.0	64.1	60.7	
Oleomargarine	do		28.8	30.5	30.5	28.7	32.1	31.6		29.1	30.2	30.6	
Nut margarine	do		28.7	30.1	29.8	28.1	29.9	30.0		27.3	28.6	28.8	
Cheese	do	21.6	35.9	36.0	35.5	38.5	38.9	38.0	23.5	39.1	39.4	38.3	
Lard	do	17.3	19.1	19.2	18.8	16.9	18.0	17.6	14.6	17.0	17.2	16.7	
Vegetable lard substitute	do		24.9	27.4	27.8	23.7	28.0	27.6		23.3	25.2	24.9	
Eggs, strictly fresh	Dozen	23.5	33.8	38.8	30.8	34.0	50.5	29.7	22.6	35.9	53.7	34.8	
Bread	Pound	5.5	8.6	9.8	9.8	9.3	10.2	10.2	5.5	8.2	9.0	9.0	
Flour	do	3.0	4.7	4.2	4.2	5.0	4.5	4.6	3.6	5.1	4.7	4.8	
Corn meal	do	3.0	4.0	4.2	4.2	4.4	5.1	5.0	2.5	3.8	4.2	4.3	
Rolls oats	do		8.7	8.8	8.7	10.4	10.8	10.7		9.1	9.2	9.1	
Corn flakes	8-oz. pkg		11.7	11.6	11.7	10.1	10.1	10.5		9.4	9.4	9.4	
Wheat cereal	28-oz. pkg		25.0	25.3	25.4	26.3	25.3	25.3		24.4	24.0	23.8	
Macaroni	Pound		18.3	18.2	18.0	19.8	20.0	19.8		21.8	21.0	21.1	
Rice	do	7.7	10.9	11.8	11.7	10.1	10.0	10.5	9.4	10.4	10.2	10.2	
Beans, navy	do		10.8	10.3	10.4	12.1	9.4	9.3		11.7	9.6	9.6	
Potatoes	do	0.9	1.5	2.4	2.4	2.0	2.5	2.6	1.5	2.6	2.9	2.8	
Onions	do		4.7	4.8	4.8	5.6	7.1	6.7		5.8	6.5	6.3	
Cabbage	do		5.9	6.2	6.7	7.6	5.5	6.0		9.0	6.7	7.8	
Beans, baked	No. 2 can		15.3	16.2	16.2	13.3	13.2	13.2		11.8	11.7	11.8	
Corn, canned	do		16.7	17.6	17.6	14.7	14.9	14.8		15.0	14.8	14.7	
Peas, canned	do		18.2	19.5	19.2	17.9	18.1	18.1		15.7	16.5	16.5	
Tomatoes, canned	do		15.8	15.9	16.4	14.7	14.4	14.4		11.6	10.9	11.0	
Sugar, granulated	Pound	6.1	10.9	10.8	10.8	11.0	11.5	11.6	5.0	9.5	9.9	9.8	
Tea	do	50.0	66.0	74.5	74.8	71.1	77.5	77.5	57.5	76.2	77.3	76.5	
Coffee	do	28.0	39.3	40.9	43.4	39.0	37.8	38.5	28.8	35.4	34.5	36.9	
Prunes	do		18.0	14.2	14.3	20.6	19.0	18.8		22.8	19.3	19.2	
Raisins	do		18.6	15.4	15.6	20.1	16.8	16.5		17.9	15.4	15.0	
Bananas	Dozen		15.7	15.8	15.7	11.4	11.7	12.7		37.3	39.4	40.0	
Oranges	do		47.9	41.4	40.9	53.9	37.3	35.2		46.3	41.5	37.3	

¹ No. 2½ can.² Per pound.

Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food ⁷ in March, 1924, compared with the average cost in the year 1913, in March, 1923, and in February, 1924. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.⁸

⁷ For list of articles, see note 2, p. 29.⁸ The consumption figure used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY LABOR REVIEW for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the MONTHLY LABOR REVIEW for March, 1921, p. 26.

[1980]

Effort has been made by the bureau each month to have perfect reporting cities. For the month of March 99.6 per cent of all the firms reporting in the 51 cities sent in a report promptly. The following were perfect reporting cities; that is, every merchant in the following-named 46 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Birmingham, Boston, Bridgeport, Buffalo, Chicago, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Kansas City, Little Rock, Louisville, Los Angeles, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Pittsburgh, Portland, Me., Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, San Francisco, Savannah, Scranton, Seattle, Springfield, and Washington, D. C.

The following summary shows the willingness with which the merchants responded in March, 1924:

RETAIL PRICE REPORTS RECEIVED DURING MARCH, 1924

Item	United States	Geographical division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received.....	99.6	99.7	99	100	100	99
Number of cities in each section from which every report was received.....	46	13	6	14	5	5

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN MARCH, 1924, COMPARED WITH THE COST IN FEBRUARY, 1924, MARCH, 1923, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase March, 1924, compared with—		Percentage decrease March, 1924, compared with February, 1924	City	Percentage increase March, 1924, compared with—		Percentage decrease March, 1924, compared with February, 1924
	1913	March, 1923			1913	March, 1923	
Atlanta.....	40	1	3	Minneapolis.....	43	1	2
Baltimore.....	49	1	2	Mobile.....	1	1	2
Birmingham.....	47	2	2	Newark.....	42	1	3
Boston.....	46	¹ 1	3	New Haven.....	45	1	2
Bridgeport.....		0.2	3	New Orleans.....	43	2	2
Buffalo.....	47	0.3	4	New York.....	47	¹ 1	4
Butte.....	1	1	3	Norfolk.....		3	2
Charleston, S. C.....	49	2	2	Omaha.....	42	3	2
Chicago.....	52	4	2	Peoria.....		4	3
Cincinnati.....	43	3	2	Philadelphia.....	44	¹ 0.1	3
Cleveland.....	42	1	3	Pittsburgh.....	45	0.3	3
Columbus.....		4	3	Portland, Me.....		¹ 1	2
Dallas.....	43	3	1	Portland, Oreg.....	30	2	1
Denver.....	31	1	2	Providence.....	47	¹ 2	3
Detroit.....	48	1	3	Richmond.....	52	¹ 0.2	2
Fall River.....	44	¹ 2	3	Rochester.....		¹ 1	4
Houston.....		1	1	St. Louis.....	45	2	2
Indianapolis.....	38	1	3	St. Paul.....		0.2	2
Jacksonville.....	39	2	3	Salt Lake City.....	22	0.4	2
Kansas City.....	40	1	2	San Francisco.....	41	5	1
Little Rock.....	35	¹ 2	3	Savannah.....		¹ 1	2
Los Angeles.....	40	6	3	Scranton.....	47	¹ 2	1
Louisville.....	35	3	2	Seattle.....	38	4	3
Manchester.....	44	¹ 1	0.3	Springfield, Ill.....		4	3
Memphis.....	37	2	3	Washington, D. C.....	49	0.3	3
Milwaukee.....	48	3	3				

¹ Decrease.

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Retail Prices of Coal in the United States^a

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, March 15, 1923, and February 15 and March 15, 1924, for the United States and for each of the cities from which prices have been obtained. Prices for coal are secured from the cities from which monthly retail prices of food are received.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds used. The coal dealers in each city are asked to quote prices on the kinds of bituminous coal usually sold for household use.

The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bins where an extra handling is necessary.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, MARCH 15, 1923, AND FEBRUARY 15 AND MARCH 15, 1924

City, and kind of coal	1913		1923	1924	
	Jan. 15	July 15	Mar. 15	Feb. 15	Mar. 15
United States:					
Pennsylvania anthracite—					
Stove	\$7.99	\$7.46	\$15.49	\$15.73	\$15.73
Chestnut	8.15	7.68	15.52	15.71	15.70
Bituminous	5.48	5.39	11.03	9.80	9.53
Atlanta, Ga.:					
Bituminous	5.88	4.83	10.40	8.13	8.13
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove	7.70	7.24	16.25	16.75	16.75
Chestnut	7.93	7.49	16.25	16.50	16.50
Bituminous			10.40	7.95	7.70
Birmingham, Ala.:					
Bituminous	4.22	4.01	8.39	8.23	8.15
Boston, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.50	16.00	15.30	15.50
Chestnut	8.25	7.75	16.00	15.30	15.50
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove			16.50	16.13	16.50
Chestnut			16.50	16.13	16.50
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	6.75	6.54	13.24	13.66	13.63
Chestnut	6.99	6.80	13.24	13.66	13.63
Butte, Mont.:					
Bituminous			10.97	11.28	10.98
Charleston, S. C.:					
Pennsylvania anthracite—					
Stove	8.38	7.75	17.50	17.00	17.00
Chestnut	8.50	8.00	17.10	17.10	17.10
Bituminous	6.75	6.75	12.00	12.00	12.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove	8.00	7.80	16.18	17.00	16.75
Chestnut	8.25	8.05	16.05	17.00	16.75
Bituminous	4.97	4.65	9.96	8.73	8.56
Cincinnati, Ohio:					
Bituminous	3.50	3.38	9.35	8.50	7.72
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove	7.50	7.25	15.75	15.41	15.41
Chestnut	7.75	7.50	15.75	15.41	15.41
Bituminous	4.14	4.14	11.27	8.60	8.42
Columbus, Ohio:					
Bituminous			9.76	7.28	7.24

¹ Per ton of 2,240 pounds.

^a Prices of coal were formerly secured semiannually and published in the March and September issues of the MONTHLY LABOR REVIEW. Since June, 1920, these prices have been secured and published monthly.

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AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, ETC.—Continued.

City, and kind of coal	1913		1923	1924	
	Jan. 15	July 15	Mar. 15	Feb. 15	Mar. 15
Dallas, Tex.:					
Arkansas anthracite—					
Egg			\$17.63	\$18.00	\$17.75
Bituminous	\$8.25	\$7.21	15.38	14.68	14.68
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	8.88	9.00	17.25	16.75	16.75
Stove, 3 and 5 mixed	8.50	8.50	17.25	16.75	16.75
Bituminous	5.25	4.88	10.76	10.75	8.51
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove	8.00	7.45	16.00	15.88	15.88
Chestnut	8.25	7.65	16.00	15.88	15.88
Bituminous	5.20	5.20	11.54	9.63	9.52
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.43	16.50	16.00	16.00
Chestnut	8.25	7.61	16.17	15.92	16.00
Houston, Tex.:					
Bituminous			12.50	13.17	13.17
Indianapolis, Ind.:					
Pennsylvania anthracite—					
Stove	8.95	8.00	15.75	16.75	16.75
Chestnut	9.15	8.25	15.75	16.75	16.75
Bituminous	3.81	3.70	9.24	7.21	7.12
Jacksonville, Fla.:					
Bituminous	7.50	7.00	15.00	13.00	13.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace			16.93	16.36	16.14
Stove, No. 4			17.88	17.38	17.25
Bituminous	4.39	3.94	8.82	8.52	8.46
Little Rock, Ark.:					
Arkansas anthracite—					
Egg			15.00	15.00	15.00
Bituminous	6.00	5.33	11.50	11.67	11.33
Los Angeles, Calif.:					
Bituminous	13.52	12.50	16.50	15.00	15.50
Louisville, Ky.:					
Bituminous	4.20	4.00	10.13	8.73	8.73
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove	10.00	8.50	18.00	18.00	18.00
Chestnut	10.00	8.50	18.00	17.00	17.00
Memphis, Tenn.:					
Bituminous	4.34	4.22	9.41	7.93	7.93
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove	8.00	7.85	16.63	16.68	16.68
Chestnut	8.25	8.10	16.61	16.59	16.59
Bituminous	6.25	5.71	12.66	9.99	10.04
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove	9.25	9.05	17.90	18.14	18.12
Chestnut	9.50	9.30	17.93	18.08	18.09
Bituminous	5.89	5.79	13.39	11.33	11.04
Mobile, Ala.:					
Bituminous			11.00	11.07	11.07
Newark, N. J.:					
Pennsylvania anthracite—					
Stove	6.60	6.25	12.83	13.45	13.45
Chestnut	6.75	6.50	12.83	13.45	13.45
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove	7.50	6.25	15.75	16.00	16.00
Chestnut	7.50	6.25	15.75	16.00	16.00
New Orleans, La.:					
Pennsylvania anthracite—					
Stove	10.00	10.00	21.75	22.00	22.00
Chestnut	10.50	10.50	21.75	21.75	22.00
Bituminous	6.06	6.06	11.21	11.43	11.14
New York, N. Y.:					
Pennsylvania anthracite—					
Stove	7.07	6.66	14.13	14.13	14.33
Chestnut	7.14	6.80	14.13	14.13	14.33
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove			17.00	16.00	16.00
Chestnut			17.00	16.00	16.00
Bituminous			13.19	8.97	9.00

¹ Per 10-barrel lots (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, ETC.—Concluded

City, and kind of coal	1913		1923	1924	
	Jan. 15	July 15	Mar. 15	Feb. 15	Mar. 15
Omaha, Nebr.: Bituminous.....	\$6.63	\$6.13	\$11.16	\$10.22	\$10.20
Peoria, Ill.: Bituminous.....			7.02	6.47	6.38
Philadelphia, Pa.: Pennsylvania anthracite— Stove.....	1 7.16	1 6.89	1 15.14	1 15.71	1 15.57
Chestnut.....	1 7.38	1 7.14	1 15.14	1 15.71	1 15.57
Pittsburgh, Pa.: Pennsylvania anthracite— Stove.....	1 7.94	1 7.38	1 18.00	1 17.00	1 16.75
Chestnut.....	1 8.00	1 7.44	1 17.75	1 17.00	1 16.83
Bituminous.....	1 3.16	1 3.18	8.46	7.39	7.39
Portland, Me.: Pennsylvania anthracite— Stove.....			15.84	16.56	16.56
Chestnut.....			15.84	16.56	16.56
Portland, Oreg.: Bituminous.....	9.79	9.66	14.48	13.72	13.89
Providence, R. I.: Pennsylvania anthracite— Stove.....	1 8.25	1 7.50	1 15.50	1 16.35	1 16.35
Chestnut.....	1 8.25	1 7.75	1 15.50	1 16.35	1 16.35
Richmond, Va.: Pennsylvania anthracite— Stove.....	8.00	7.25	16.50	16.50	16.50
Chestnut.....	8.00	7.25	16.50	16.50	16.50
Bituminous.....	5.50	4.94	13.39	11.32	11.36
Rochester, N. Y.: Pennsylvania anthracite— Stove.....			13.45	14.10	14.10
Chestnut.....			13.45	14.10	14.10
St. Louis, Mo.: Pennsylvania anthracite— Stove.....	8.44	7.74	16.44	17.13	17.13
Chestnut.....	8.68	7.99	16.44	17.38	17.38
Bituminous.....	3.36	3.04	8.30	7.19	7.07
St. Paul, Minn.: Pennsylvania anthracite— Stove.....	9.20	9.05	17.67	18.14	18.14
Chestnut.....	9.45	9.30	17.64	18.09	18.09
Bituminous.....	6.07	6.04	13.85	11.53	11.26
Salt Lake City, Utah: Colorado anthracite— Furnace, 1 and 2 mixed.....	11.00	11.50		17.50	17.50
Stove, 3 and 5 mixed.....	11.00	11.50	15.00	17.73	17.73
Bituminous.....	5.64	5.46	8.69	8.48	7.47
San Francisco, Calif.: New Mexico anthracite— Cerrojos egg.....	17.00	17.00	26.75	26.50	26.50
Colorado anthracite— Egg.....	17.00	17.00	24.38	24.50	24.50
Bituminous.....	12.00	12.00	17.90	17.33	17.33
Savannah, Ga.: Pennsylvania anthracite— Stove.....			1 17.05	1 17.05	1 17.05
Chestnut.....			1 17.05	1 17.05	1 17.05
Bituminous.....			1 13.67	1 12.20	1 12.02
Scranton, Pa.: Pennsylvania anthracite— Stove.....	4.25	4.31	9.82	10.53	10.53
Chestnut.....	4.50	4.56	9.82	10.53	10.53
Seattle, Wash.: Bituminous.....	1 7.63	1 7.70	1 10.26	1 10.24	1 10.03
Springfield, Ill.: Bituminous.....			4.98	4.55	4.50
Washington, D. C.: Pennsylvania anthracite— Stove.....	1 7.50	1 7.38	1 15.91	1 16.18	1 16.14
Chestnut.....	1 7.65	1 7.53	1 15.91	1 16.10	1 16.06
Bituminous.....			1 10.62	1 9.00	1 9.00

¹ Per ton of 2,240 pounds.² Per 25-bushel lots (1,000 pounds).³ Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.⁴ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.⁵ Prices in Zone A. The cartage charges in Zone A were as follows: January and July, 1913, \$0.50; March, 1923, \$1.25, and February and March, 1924, \$1.25. These charges have been included in the price.

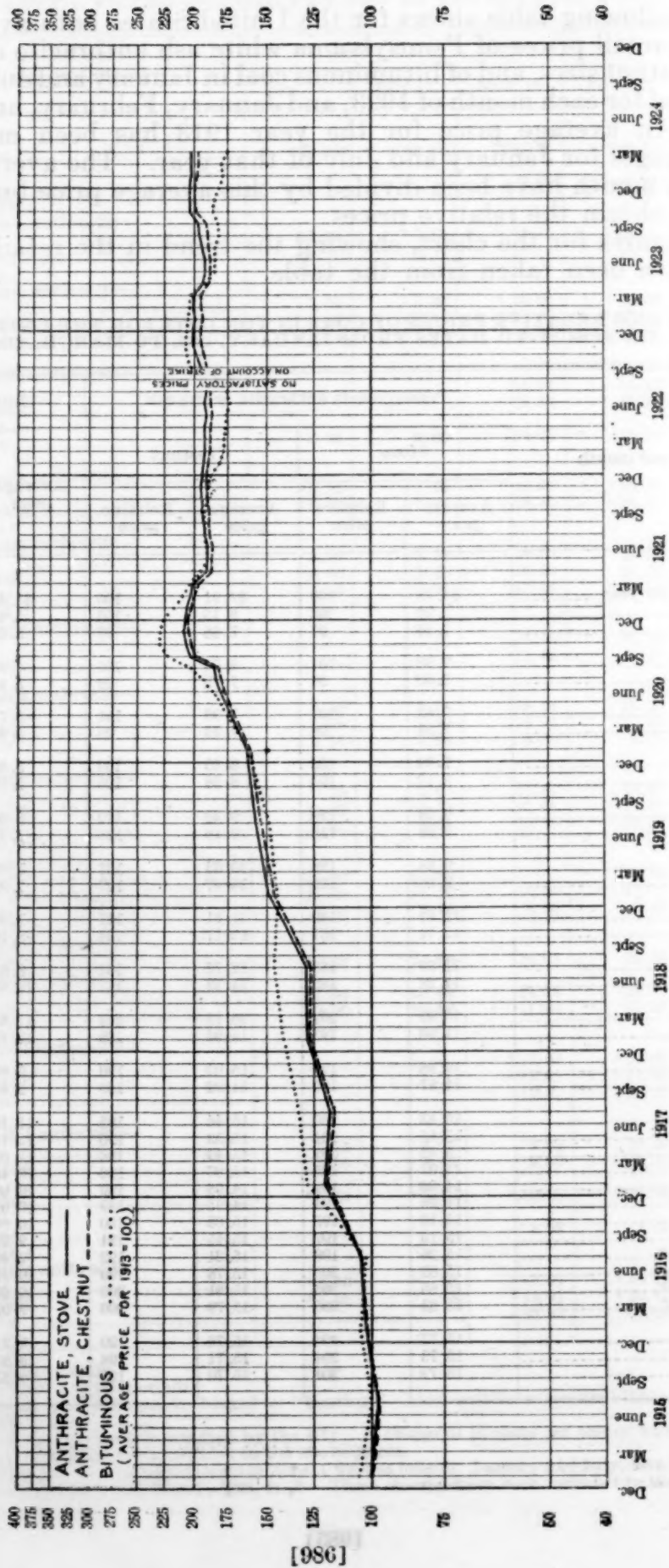
The following table shows for the United States both average and relative retail prices of Pennsylvania white ash anthracite coal, stove and chestnut sizes, and of bituminous coal in January and July, 1913 to 1922, and for each month of 1923, and January, February, and March, 1924. An average price for the year 1913 has been made from the averages for January and July of that year. The average prices for each month have been divided by this average price for the year 1913 to obtain the relative prices.

The figures for the chart, showing the trend in the retail prices of coal, have been taken from the table.

AVERAGE AND RELATIVE PRICES OF COAL IN TON LOTS FOR THE UNITED STATES
ON SPECIFIED DATES FROM JANUARY, 1913, TO MARCH, 1924

Year and month	Pennsylvania anthracite, white ash				Bituminous	
	Stove		Chestnut		Average price	Relative price
	Average price	Relative price	Average price	Relative price		
1913—						
Average for year.....	\$7. 73	100	\$7. 91	100	\$5. 43	100
January.....	7. 99	103	8. 15	103	5. 48	101
July.....	7. 46	97	7. 68	97	5. 39	99
1914—						
January.....	7. 80	101	8. 00	101	5. 97	110
July.....	7. 60	98	7. 78	98	5. 46	101
1915—						
January.....	7. 83	101	7. 99	101	5. 71	105
July.....	7. 54	98	7. 73	98	5. 44	100
1916—						
January.....	7. 93	103	8. 13	103	5. 69	105
July.....	8. 12	105	8. 28	105	5. 52	102
1917—						
January.....	9. 20	120	9. 40	119	6. 96	128
July.....	9. 08	118	9. 16	116	7. 21	133
1918—						
January.....	9. 88	128	10. 03	127	7. 68	141
July.....	9. 96	129	10. 07	127	7. 92	146
1919—						
January.....	11. 51	149	11. 61	147	7. 90	145
July.....	12. 14	157	12. 17	154	8. 10	149
1920—						
January.....	12. 59	163	12. 77	161	8. 81	162
July.....	14. 28	185	14. 33	181	10. 55	194
1921—						
January.....	15. 99	207	16. 13	204	11. 82	218
July.....	14. 90	193	14. 95	189	10. 47	193
1922—						
January.....	14. 98	194	15. 02	190	9. 89	182
July.....	14. 87	192	14. 92	189	9. 49	175
1923—						
January.....	15. 43	200	15. 46	195	11. 18	206
February.....	15. 55	201	15. 53	196	11. 14	205
March.....	15. 52	201	15. 49	196	11. 03	203
April.....	15. 07	195	15. 07	190	10. 46	192
May.....	14. 96	194	14. 96	189	10. 08	185
June.....	14. 98	194	14. 95	189	10. 04	185
July.....	15. 10	195	15. 05	190	10. 04	185
August.....	15. 19	197	15. 15	191	9. 94	183
September.....	15. 26	198	15. 21	192	9. 99	184
October.....	15. 82	205	15. 78	199	10. 11	186
November.....	15. 86	205	15. 81	200	10. 05	185
December.....	15. 83	205	15. 79	200	9. 93	183
1924—						
January.....	15. 77	204	15. 76	199	9. 75	179
February.....	15. 73	204	15. 71	198	9. 80	180
March.....	15. 72	204	15. 70	198	9. 53	175

TREND IN RETAIL PRICES OF COAL FOR THE UNITED STATES, JANUARY, 1914, TO MARCH, 1924



[1986]

Retail Prices of Gas in the United States ^a

THE following table shows for 51 cities the net price for the first 1,000 cubic feet of gas used for household purposes. Prices are, in most cases, for manufactured gas, but prices for natural gas have also been quoted for those cities where it is in general use. For Buffalo and Los Angeles prices are given for natural and manufactured gas, mixed. The prices shown do not include any extra charge for service.

NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS, FOR HOUSEHOLD USE, ON APRIL 15 OF EACH YEAR, 1913 TO 1920, AND ON MAY 15, 1921, MARCH 15 AND DECEMBER 15, 1922, MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1923, AND MARCH 15, 1924, BY CITIES

City	Apr. 15, 1913	Apr. 15, 1914	Apr. 15, 1915	Apr. 15, 1916	Apr. 15, 1917	Apr. 15, 1918	Apr. 15, 1919	Apr. 15, 1920	May 15, 1921	Mar. 15, 1922	Dec. 15, 1922	Mar. 15, 1923	June 15, 1923	Sept. 15, 1923	Dec. 15, 1923	Mar. 15, 1924
Atlanta	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.15	\$1.15	\$1.90	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.55	\$1.55
Baltimore	.90	.80	.80	.75	.75	.75	.75	.75	.75	.92	.92	.92	.92	.85	.85	.85
Birmingham	1.00	.95	.95	.95	.95	.95	.95	.95	.88	.88	.80	.80	.80	.80	.80	.88
Boston	.82	.82	.80	.80	.80	.85	1.02	1.07	1.42	1.34	1.30	1.25	1.25	1.25	1.25	1.20
Bridgeport	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.30	1.60	1.50	1.50	1.50	1.50	1.50	1.50
Buffalo	1.00	1.00	1.00	1.00	1.00	1.00	1.45	1.45	1.45	1.45						
Butte	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Charleston	1.10	1.10	1.10	1.10	1.00	1.10	1.10	1.10	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Chicago	.80	.80	.80	.80	.80	.76	.94	.90	1.29	1.20	1.20	1.20	1.20	1.17	1.17	1.17
Cleveland	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	1.25	1.25	1.25
Denver	.85	.80	.80	.80	.80	.85	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95
Detroit	.75	.75	.75	.75	.75	.75	.79	.79	.85	.79	.79	.79	.79	.79	.79	.79
Fall River	.80	.80	.80	.80	.80	.95	.95	1.05	1.25	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Houston	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Indianapolis	.60	.55	.55	.55	.55	.55	.60	.60	.90	.90	1.20	1.20	1.15	1.15	1.15	1.15
Jacksonville	1.20	1.20	1.15	1.15	1.15	1.25	1.25	1.50	1.75	1.75	1.65	1.65	1.65	1.65	2.40	2.40
Manchester	1.10	1.10	1.00	1.00	1.00	1.00	1.10	1.10	1.50	1.40	1.40	1.40	1.40	1.40	1.40	1.30
Memphis	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.35	1.35	1.20	1.20	1.20	1.20	1.20	1.20
Milwaukee	.75	.75	.75	.75	.75	.75	.75	.75	.90	.90	.98	.98	.98	.95	.95	.95
Minneapolis	.85	.80	.80	.77	.77	.77	.95	.95	1.28	1.02	.99	1.03	1.05	1.01	1.01	1.00
Mobile	1.10	1.10	1.10	1.10	1.10	1.10	1.35	1.35	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Newark	1.00	.90	.90	.90	.90	.97	.97	1.15	1.40	1.40	1.25	1.25	1.25	1.25	1.25	1.25
New Haven	.90	.90	.90	.90	.90	1.00	1.10	1.10	1.10	1.10	1.45	1.45	1.45	1.45	1.45	1.45
New Orleans	1.10	1.00	1.00	1.00	1.00	1.00	1.30	1.30	1.30	1.45	1.30	1.30	1.30	1.30	1.30	1.30
New York	.84	.84	.83	.83	.83	.83	.85	.87	1.36	1.28	1.21	1.21	1.23	1.23	1.23	1.23
Norfolk	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.60	1.40	1.45	1.35	1.40	1.40	1.35	1.30	1.40
Omaha	1.15	1.15	1.15	1.00	1.00	1.15	1.15	1.15	1.53	1.40	1.35	1.35	1.35	1.35	1.35	1.30
Peoria	.90	.90	.90	.90	.85	.85	.85	.85	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Philadelphia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pittsburgh	1.00	1.00	1.00	1.00	1.00	1.00	1.00	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
Portland, Me.	1.10	1.00	1.00	1.00	1.00	1.00	1.40	1.40	1.85	1.75	1.55	1.55	1.55	1.55	1.55	1.55
Portland, Oreg.	.95	.95	.95	.95	.95	.95	.95	.95	1.67	1.50	1.43	1.43	1.43	1.43	1.43	1.43
Providence	.85	.85	.85	.85	.85	1.00	1.30	1.30	1.25	1.25	1.15	1.10	1.05	1.05	1.05	1.05
Richmond	.90	.90	.90	.80	.80	.80	1.00	1.00	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Rochester	.95	.95	.95	.95	.95	.95	.95	.95	1.05	1.10	1.05	1.05	1.05	1.00	1.00	1.00
St. Louis	.80	.80	.80	.80	.75	.75	.75	.85	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00
St. Paul	.95	.90	.90	.85	.85	.85	.85	.85	1.00	1.00	1.00	1.00	.85	.85	.85	.85
Salt Lake City	.90	.90	.90	.90	.90	.90	1.10	1.30	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
San Francisco	.75	.85	.85	.85	.85	.85	.95	1.05	1.04	.92	.92	.92	.92	.92	.92	1.00
Savannah								1.25	1.60	1.60	1.45	1.45	1.45	1.45	1.45	1.45
Seranton	.95	.95	.95	.95	.95	1.15	1.30	1.30	1.70	1.70	1.60	1.60	1.60	1.60	1.60	1.50
Seattle	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Springfield, Ill.	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.40	1.40	1.40	1.40	1.35	1.35	1.35	1.35
Washington, D.C.	.93	.93	.93	.93	.80	.90	.95	.95	1.25	1.10	1.05	1.05	1.05	1.05	1.00	1.00

¹ Plus 50 cents per month service charge.

² The rate was increased from 90 cents by order of the Federal court, and is subject to final decision by the same court. Pending the decision this increase has been impounded.

³ Plus 25 cents per month service charge.

⁴ The prices of two companies included in this average have an additional service charge of 2½ cents per day.

⁵ The price of one company included in this average has an additional service charge of 2½ cents per day.

⁶ Sale of manufactured gas discontinued.

⁷ Plus 40 cents per month service charge.

^a Retail prices of gas are published at quarterly intervals in the MONTHLY LABOR REVIEW.

[1987]

NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS, FOR HOUSEHOLD USE, ON APRIL 15 OF EACH YEAR, 1913 TO 1920, AND ON MAY 15, 1921, MARCH 15 AND DECEMBER 15, 1922, MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1923, AND MARCH 15, 1924, BY CITIES—Concluded

Natural gas

City	Apr. 15, 1913	Apr. 15, 1914	Apr. 15, 1915	Apr. 15, 1916	Apr. 15, 1917	Apr. 15, 1918	Apr. 15, 1919	Apr. 15, 1920	May 15, 1921	Mar. 15, 1922	Dec. 15, 1922	Mar. 15, 1923	June 15, 1923	Sept. 15, 1923	Dec. 15, 1923	Mar. 15, 1924
Buffalo.....	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.35	\$0.35	\$0.35	\$0.42						
Cincinnati.....	.30	.30	.30	.30	.30	.35	.35	.35	.35	.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Cleveland.....	.30	.30	.30	.30	.30	.30	.35	.35	.35	.40	.40	.40	1.45	1.45	.45	1.45
Columbus.....					.30	.30	.30	.30	.45	.45	.45	.45	.45	.45	.45	.45
Dallas.....	.45	.45	.45	.45	.45	.45	.45	.45	.68	.68	.68	.68	.68	.68	.68	.68
Kansas City, Mo.	.27	.27	.27	.27	.30	.60	.80	.80	1.80	1.80	1.85	1.85	1.85	1.85	1.85	1.85
Little Rock.....	.40	.40	.40	.40	.40	.40	.45	.45	.45	.45	.45	.45	.45	.45	1.55	1.55
Louisville.....	.62	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Pittsburgh.....	.28	.28	.28	.28	.28	.28	.35	.35	.45	.50	.50	.50	.50	.50	.53	.53

Manufactured and natural gas mixed

Los Angeles.....			\$0.68	\$0.68	\$0.68	\$0.68	\$0.75	\$0.75	\$0.75	\$0.76	\$0.69	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68
Buffalo.....											1.62	1.62	1.62	1.61	1.61	1.62

¹ Plus 50 cents per month service charge.

² Price includes a coal charge.

From the prices quoted on manufactured gas average prices have been computed for all of the cities combined and are shown in the next table for April 15 of each year from 1913 to 1920, and for May 15, September 15, and December 15, 1921, and March 15, June 15, September 15, and December 15, 1922 and 1923, and March 15, 1924. Relative prices have been computed by dividing the price of each year by the price in April, 1913.

As may be seen in the table, the price of manufactured gas changed but little until 1921. The price in March, 1924, showed an increase of 34 per cent since April, 1913. From December, 1923, to March, 1924, there was no change in price.

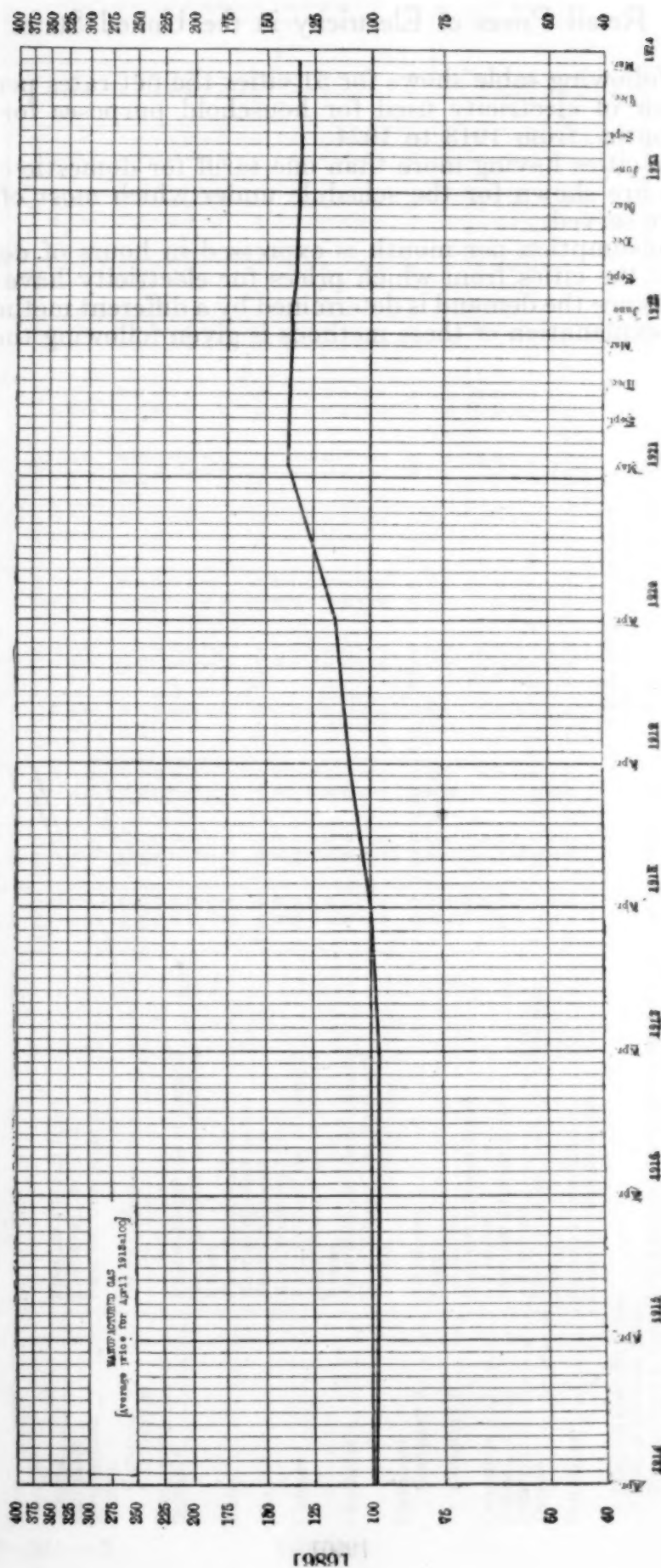
AVERAGE¹ AND RELATIVE PRICES OF MANUFACTURED GAS, FOR HOUSEHOLD USE PER 1,000 CUBIC FEET, ON APRIL 15 OF EACH YEAR, 1913 TO 1920; AND ON MAY 15, SEPTEMBER 15, AND DECEMBER 15, 1921; MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922 AND 1923, AND MARCH 15, 1924, FOR ALL CITIES COMBINED

[Average prices in April, 1913=100]

Date	Average price	Relative price	Date	Average price	Relative price
Apr. 15, 1913.....	\$0.95	100	Dec. 15, 1921.....	\$1.30	137
Apr. 15, 1914.....	.94	99	Mar. 15, 1922.....	1.29	136
Apr. 15, 1915.....	.93	98	June 15, 1922.....	1.29	136
Apr. 15, 1916.....	.92	97	Sept. 15, 1922.....	1.27	134
Apr. 15, 1917.....	.92	97	Dec. 15, 1922.....	1.27	134
Apr. 15, 1918.....	.95	100	Mar. 15, 1923.....	1.26	133
Apr. 15, 1919.....	1.04	109	June 15, 1923.....	1.26	133
Apr. 15, 1920.....	1.09	115	Sept. 15, 1923.....	1.26	133
May 15, 1921.....	1.32	139	Dec. 15, 1923.....	1.27	134
Sept. 15, 1921.....	1.31	138	Mar. 15, 1924.....	1.27	134

¹ Net price

TREND IN RETAIL PRICE OF GAS FOR THE UNITED STATES, APRIL, 1914, TO MARCH, 1924



Retail Prices of Electricity in the United States

THE following table shows for 51 cities the net rates per kilowatt hour of electricity used for household purposes for specified months, from 1913 to 1924.

For the cities having more than one tariff for domestic consumers the rates are shown for the schedule under which most of the residences are served.

The consumption per month is expressed in hours of demand for several of the cities from which prices for electricity have been obtained. Since the demand is determined by a different method in each city, the explanation of these methods is given following the table.

[990]

NET PRICE PER KILOWATT HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS, 1913 TO 1924, FOR 51 CITIES

RETAIL PRICES OF ELECTRICITY

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NET PRICE PER KILOWATT HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS, 1913 TO 1924, FOR 31 CITIES

City	Measure of consumption, per month	1923										1924	
		De- cem- ber, 1913	De- cem- ber, 1914	De- cem- ber, 1915	De- cem- ber, 1916	De- cem- ber, 1917	De- cem- ber, 1918	De- cem- ber, 1919	De- cem- ber, 1920	De- cem- ber, 1921	De- cem- ber, 1922	March	De- cem- ber
		Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Atlanta	First 100 kilowatt hours	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Baltimore	First 40 kilowatt hours	28.5	28.5	28.5	28.5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
Birmingham	First 100 kilowatt hours	38.5	38.5	38.5	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
Boston	All current	10.0	10.0	10.0	10.0	10.0	11.2	11.4	11.8	11.0	9.5	9.5	9.5
Company A	do	10.0	10.0	10.0	10.0	10.0	11.5	11.4	11.8	11.0	9.5	9.5	9.5
Company B	do	9.0	8.0	7.0	7.0	7.0	8.0	8.0	8.5	8.5	7.5	7.5	7.5
Bridgeport	First 60 hours' use of demand	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.0	6.0
Buffalo	Next 120 hours' use of demand	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Excess	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Butte	First 25 kilowatt hours	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
	Next 25 kilowatt hours	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Charleston	First 50 kilowatt hours	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 50 kilowatt hours	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Chicago	First 30 hours' use of demand	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Next 30 hours' use of demand	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cincinnati	Excess	9.5	9.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	First 30 hours' use of demand	6.7	6.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Next 30 hours' use of demand	3.8	3.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cleveland	All current	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Company A	Excess	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Company B	All current	9.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Next 600 kilowatt hours	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Columbus	All current	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Dallas	First 800 kilowatt hours	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Denver	All current	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Detroit	First 3 kilowatt hours per active room	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
	Excess	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Fall River	First 25 kilowatt hours	11.9.5	11.9.5	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6
	Next 975 kilowatt hours	11.9.5	11.9.5	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6	11.8.6

¹ First 150 kilowatt hours.

² First 50 kilowatt hours.

³ The gross rate is 10 cents per kilowatt hour with discounts of 10 per cent for a monthly consumption of 1 to 25 kilowatt hours and 15 per cent for a monthly consumption of 25 to 150 kilowatt hours. The average family used 25 or more kilowatt hours per month.

⁴ Price includes a coal charge, and a surcharge of 10 per cent from December, 1918, to June, 1920, and 5 per cent from December, 1920 to December, 1921.

⁵ For determination of demand see explanation following table.

⁶ First 100 kilowatt hours.

⁷ First 25 kilowatt hours.

⁸ First 36 hours' use of demand: For determination of demand, see explanation following table.

⁹ First 10 kilowatt hours.

¹⁰ First 2 kilowatt hours per active room.

¹¹ First 200 kilowatt hours.

¹² First 500 kilowatt hours.

NET PRICE PER KILOWATT HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS, 1913 TO 1924, FOR 51 CITIES—Continued

City	Measure of consumption, per month	1923					De- cem- ber, 1922	De- cem- ber, 1921	De- cem- ber, 1920	De- cem- ber, 1919	De- cem- ber, 1918	De- cem- ber, 1917	De- cem- ber, 1916	De- cem- ber, 1915	De- cem- ber, 1914	De- cem- ber, 1913	March, 1924
		March	June	Septem- ber	De- cem- ber	Cents											
Houston ¹	First 30 hours' use of demand	7.2	7.2	7.2	7.2	7.2	7.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	12.4	7.2
	Excess	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5
Indianapolis:	First 50 kilowatt hours	7.0	7.0	7.0	7.0	7.0	7.0	16.7.5	16.7.5	16.6.5	16.6.5	16.6.5	16.6.5	16.6.5	16.6.5	7.5	7.0
Company A	Next 150 kilowatt hours	6.5	6.5	6.5	6.5	6.5	6.5	16.7.0	16.7.0	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	11.7	6.5
Company B	First 50 kilowatt hours	7.0	7.0	7.0	7.0	7.0	7.0	16.7.5	16.7.5	16.6.5	16.6.5	16.6.5	16.6.5	16.6.5	16.6.5	11.7	7.0
	Next 150 kilowatt hours	6.5	6.5	6.5	6.5	6.5	6.5	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	7.0	6.5
Jacksonville	All current	7.0	7.0	7.0	7.0	7.0	7.0	16.7.0	16.7.0	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	16.5.0	7.0	7.0
Kansas City	First 5 kilowatt hours per active room (minimum, 3 rooms)	18.7	18.7	18.7	18.7	18.7	18.7	18.8.7	18.8.7	19.0	18.4	17.6	17.6	18.9.9	18.9.9	18.9.9	7.5
	Next 5 kilowatt hours per room	5.0	5.0	5.0	5.0	5.0	5.0	5.4	5.4	5.2	4.8	4.8	4.5	4.5	4.5	4.5	5.0
Little Rock	First 200 kilowatt hours	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	13.5	10.0
Los Angeles:	First 100 kilowatt hours	5.6	5.6	5.6	5.6	5.6	5.6	6.2	6.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6
Company A	do.	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	11.4	7.6
Company B	One to 149 kilowatt hours	12.0	12.0	12.0	12.0	12.0	12.0	21.12.0	21.12.0	21.12.0	21.12.0	21.12.0	21.12.0	21.12.0	21.12.0	20.11.4	12.0
Louisville	First 25 kilowatt hours	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Manchester	Next 50 kilowatt hours	8.0	8.0	8.0	8.0	8.0	8.0	9.0	9.0	23.6.0	23.6.0	23.6.0	23.6.0	23.6.0	23.6.0	20.10.0	8.0
Memphis	First 6 kilowatt hours per room	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Excess	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Milwaukee	First 5 kilowatt hours for each of the first 5 active rooms ²¹	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	Additional energy up to 9 kilowatt hours for each active room	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Minneapolis	First 3 kilowatt hours per active room	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	Excess	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Mobile	Next 3 kilowatt hours per active room	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Moble	First 50 kilowatt hours	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Newark	First 500 kilowatt hours	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
New Haven	All current	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
New Orleans	First 20 kilowatt hours ²¹	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
	Next 30 kilowatt hours	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6	31.7.6
New York:	First 1,000 kilowatt hours	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Company A	All currents ²²	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Company B	First 60 hours' use of demand	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Company C ²³	First 100 kilowatt hours	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
Norfolk	First 150 kilowatt hours	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Omaha	Next 150 kilowatt hours	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5

[1922]

First 5 kilowatt hours for each of the first 2 rooms²⁴

NET PRICE PER KILOWATT HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS, 1913 TO 1924, FOR 51 CITIES—Concluded

City	Measure of consumption, per month	1923									
		March	June	September	December	December, 1921	December, 1920	December, 1919	December, 1918	December, 1917	December, 1916
St. Louis—Concluded Company B.....	First 27 kilowatt hours ⁴¹	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	Next 12 kilowatt hours ⁴²	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	Excess.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
St. Paul.....	First 30 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	Excess.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	First 250 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
Salt Lake City— San Francisco: Company A.....	First 10 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	Next 40 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	First 10 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
Savannah: Company A.....	First 50 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	Excess.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	First 100 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
Saratoga: Seattle: Company A.....	First 150 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	Excess.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	First 40 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
Springfield: Company A.....	First 30 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	Next 70 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	First 30 kilowatt hours.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
Washington, D. C. ⁴³	Excess.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6
	First 120 hours' use of demand.....	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6	Cents 48 7.6

⁴¹ First 50 kilowatt hours.⁴² For determination of demand see explanation following table.⁴³ First 100 kilowatt hours.⁴⁴ First 10 kilowatt hours.⁴⁵ All current.⁴⁶ For a house of 5 or 6 rooms. For a house of 4 rooms or less, 10 kilowatt hours is paid for at the primary rate. For a house of 7 or 8 rooms, 20 kilowatt hours is paid for at the primary rate.⁴⁷ For a house of 6 rooms or less 15 kilowatt hours; for a house of 7 or 8 rooms, 20 kilowatt hours.⁴⁸ For a house of 6 rooms or less, 15 kilowatt hours at the primary rate and 5 at the secondary rate. For a house of 7 or 8 rooms, 20 kilowatt hours at the primary rate and 10 at the secondary rate.⁴⁹ For a house of 4 rooms or less, 8 kilowatt hours at the primary rate and 6 at the secondary rate. For a house of 5 or 6 rooms, 12 kilowatt hours at the primary rate and 9 at the secondary rate.⁵⁰ For a house of 7 or 8 rooms, 16 kilowatt hours at the primary rate and 12 at the secondary rate.⁵¹ For a house of 4 rooms or less 10 kilowatt hours is paid for at the primary rate. For a house of 5 or 6 rooms 15 kilowatt hours is paid for at the primary rate, and for a house of 7 or 8 rooms 20 kilowatt hours is paid for at the primary rate.⁵² For a house of 5 or 6 rooms. For a house of 4 rooms or less 8 kilowatt hours is paid for at the secondary rate, and for a house of 7 or 8 rooms 16 kilowatt hours is paid for at the secondary rate.⁵³ First 30 kilowatt hours.⁵⁴ First 15 kilowatt hours.⁵⁵ First 60 kilowatt hours.⁵⁶ First 45 kilowatt hours.⁵⁷ First 30 hours' use of demand. For determination of demand see explanation following table.⁵⁸ Next 30 hours' use of demand. For determination of demand see explanation following table.

Determination of Demand

IN BUFFALO the demand consists of two parts—lighting, 25 per cent of the total installation, but never less than 250 watts; and power, $2\frac{1}{2}$ per cent of the capacity of any electric range, water heater, or other appliance of 1,000 watts or over and 25 per cent of the rated capacity of motors exceeding one-half horsepower but less than 1 horsepower. The installation is determined by inspection of premises.

In Chicago, the equivalent in kilowatt hours to 30 hours' use of demand has been estimated as follows: For a rated capacity of 475 to 574 watts, 11 kilowatt hours; 575 to 674 watts, 12 kilowatt hours; 675 to 774 watts, 13 kilowatt hours; and 775 to 874 watts, 14 kilowatt hours. Although the equivalent in kilowatt hours to 30 hours' use of demand of from 1 to 1,500 watts is given on the printed tariff, the equivalent is here shown only for installations of from 475 to 874 watts; the connected load of the average workman's home being, as a rule, within this range.

In Cincinnati, the demand has been estimated as being 70 per cent of the connected load, excluding appliances.

In Cleveland, from December, 1913, to December, 1919, inclusive, Company A determined the demand by inspection as being 40 per cent of the connected load. From December, 1919, to the present time, there has been a flat rate for all current consumed.

In Houston, the demand is estimated as 50 per cent of the connected load, each socket opening being rated at 50 watts.

In New York the demand for Company C, when not determined by meter, has been computed at 50 per cent of total installation in residences, each standard socket being rated at 50 watts and all other outlets being rated at their actual kilowatt capacity.

In Pittsburgh since December, 1919, the demand has been determined by inspection. The first 10 outlets have been rated at 30 watts each, the next 20 outlets at 20 watts each, and each additional outlet at 10 watts. Household utensils and appliances of not over 660 watts each have been excluded.

In Portland, Oreg., the demand for Company A has been estimated as one-third of the connected lighting load. Ranges, heating devices, and small power up to rated capacity of 2 kilowatts are not included.

For Company B the demand, when not based on actual measurement, was estimated at one-third of the connected load. No demand was established at less than 233 watts.

In Springfield, Ill., the demand for Company A from December, 1913, to September, 1922, was the active load predetermined as follows: 80 per cent of the first 500 watts of connected load plus 60 per cent of that part of the connected load in excess of the first 500 watts—minimum active load, 150 watts.

In Washington, D. C., the demand is determined by inspection and consists of 100 per cent of the connected load, excluding small fans and heating and cooking appliances.

Index Numbers of Wholesale Prices in March, 1924

THE general trend of wholesale prices was downward in March, according to information gathered in representative markets by the United States Department of Labor through the Bureau of Labor Statistics. The bureau's weighted index number, which includes 404 commodities or price series, stands at 150 for March as compared with 152 in the preceding month.

Large decreases from the February level of prices took place among farm products, due to declines in cotton and cotton seed, eggs, flaxseed, packers' hides, wheat, oats, rye, potatoes, and tobacco. The decrease in the group as a whole was over 4 per cent. In the group of foodstuffs the decreases averaged nearly $1\frac{1}{2}$ per cent, while in the cloths and clothing group they averaged $2\frac{1}{2}$ per cent.

Smaller decreases took place among chemicals and drugs and among house-furnishing goods. No change in the general price level was reported for the two groups of building materials and miscellaneous commodities. In the group of fuel and lighting materials and in that of metals and metal products prices in March were slightly higher than in February.

Of the 404 commodities or price series for which comparable data for February and March were collected, decreases were shown in 155 instances and increases in 81 instances. In 168 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES

[1913=100]

Group	March, 1923	1924	
		February	March
Farm products.....	143	143	137
Foods.....	143	143	141
Cloths and clothing.....	201	196	191
Fuel and lighting.....	206	180	181
Metals and metal products.....	149	143	144
Building materials.....	198	182	182
Chemicals and drugs.....	135	131	130
House-furnishing goods.....	185	176	175
Miscellaneous.....	127	113	113
All commodities.....	150	152	150

Comparing prices in March with those of a year ago, as measured by changes in the index number, it is seen that the general level has declined over $5\frac{1}{2}$ per cent. In all groups prices were lower than in the corresponding month of last year, ranging from approximately $1\frac{1}{2}$ per cent in the case of foodstuffs to over 12 per cent in the case of fuel and lighting materials.

Effect of Change of Weights on Index Numbers of Wholesale Prices

THE July, 1922, number of the MONTHLY LABOR REVIEW contained (pp. 59-62) a brief explanation of the revised index numbers of wholesale prices constructed by the Bureau of Labor Statistics. It was there explained that the revision consisted of (1) a regrouping of the commodities and the addition of a considerable number of new articles, and (2) the use of 1919 census data for weighting purposes in place of the 1909 census data formerly employed. Accompanying the explanation was a table, a summary of which is given below, showing the revised index numbers for all commodities combined, in comparison with the former series for the period from January, 1913, to April, 1922, when the old series was discontinued.

INDEX NUMBERS OF WHOLESALE PRICES, 1913 TO APRIL, 1922
[1913=100]

Month	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
January:										
Old series	100	100	99	110	151	185	203	248	177	148
New series	100	98	98	113	153	184	199	233	170	138
February:										
Old series	100	99	101	112	156	186	197	249	167	151
New series	100	99	99	115	157	186	193	232	160	141
March:										
Old series	99	99	99	114	161	187	201	253	162	152
New series	100	98	99	119	162	187	196	234	155	142
April:										
Old series	98	98	100	117	172	190	203	265	154	152
New series	100	98	99	121	173	190	199	245	148	143
May:										
Old series	98	98	101	118	182	190	207	272	151	-----
New series	99	97	100	122	183	190	202	247	145	-----
June:										
Old series	100	99	99	119	185	193	207	269	148	-----
New series	99	97	99	123	185	191	203	243	142	-----
July:										
Old series	100	100	101	119	186	198	218	262	148	-----
New series	100	97	100	123	188	196	212	241	141	-----
August:										
Old series	101	103	100	123	185	202	226	250	152	-----
New series	100	101	100	126	189	200	216	231	142	-----
September:										
Old series	102	104	99	128	183	207	220	242	152	-----
New series	102	102	100	130	187	204	210	226	141	-----
October:										
Old series	101	99	101	134	181	204	223	225	150	-----
New series	101	97	102	136	183	202	211	211	142	-----
November:										
Old series	101	98	103	144	183	206	230	207	149	-----
New series	100	97	104	146	183	203	217	196	141	-----
December:										
Old series	99	98	106	146	182	206	238	189	149	-----
New series	99	97	108	149	182	202	223	179	140	-----
Year:										
Old series	100	100	101	124	176	196	212	243	153	-----
New series	100	98	101	127	177	194	206	226	147	-----

On comparing the above figures it is seen that from 1913 to 1918 the two series showed little divergence. In 1919 they moved farther apart, reaching the point of greatest separation in the summer of 1920. In 1921 their spread was materially lessened, this condition continuing to April, 1922, when the comparison ended. It is observed that while the two series harmonize quite closely over most of the period, a wide divergence is shown in certain months. At the peak of prices in May, 1920, the old index stood at 272 and the revised index at 247, a difference of 25 points. This and other marked discrepancies in the two series have led to some speculation as to what causes are responsible for the results noted.

[1922]

The outstanding feature in the revision of the index numbers was the substitution of new weighting factors based on the 1919 census of production in place of the 1909 data formerly employed. This has led to the assumption in some quarters that the differences between the two series are due wholly or in large measure to that cause. As a test of this theory the bureau has made certain comparisons in which the old and new weights have been applied to identical lists of commodities, i. e., by retaining the old list of commodities but constructing the index numbers with the use of the revised weights. In the following table the old and new weighting factors for the important group of farm products, as it stood prior to the revision, are shown. In the case of a few articles, where changes were made at the time of revision, a reallocation of the 1919 weights as published elsewhere by the bureau ¹ has been necessary in order that they might conform to the former list of commodities.

1909 AND 1919 WEIGHTING FACTORS OF FARM PRODUCTS (UNREVISED LIST)

Commodity	1909 weights	1919 weights
Cotton, middling, pounds:		
New Orleans.....	3,606,507,000	3,806,921,000
New York.....	1,803,253,000	1,903,461,000
Flaxseed, No. 1, bushels.....	20,106,000	22,036,000
Grain, bushels:		
Barley, fair to good, malting.....	75,301,000	57,705,000
Corn, cash—		
Contract grades.....	184,311,000	164,459,000
No. 3, mixed.....	276,467,000	246,689,000
Oats, cash.....	267,860,000	325,609,000
Rye, cash.....	29,521,000	88,909,000
Wheat, cash—		
No. 1, northern spring, Chicago.....	26,984,000	31,909,000
No. 2, red winter, Chicago.....	124,072,000	146,619,000
No. 2, hard winter, Kansas City.....	248,144,000	293,237,000
No. 1, northern spring, Minneapolis.....	242,859,000	287,179,000
No. 1, hard white, Portland, Oreg.....	41,357,000	48,872,000
Hay, tons:		
Alfalfa, No. 1.....	5,029,000	5,721,000
Timothy, No. 1.....	5,657,000	6,451,000
Hides, pounds:		
Calfskins, No. 1.....	131,362,000	152,926,000
Goatskins, Brazilian.....	102,804,000	132,905,000
Packers, green, salted—		
Heavy native steers.....	614,829,000	743,493,000
Heavy Texas steers.....	307,415,000	371,747,000
Hops, pounds:		
New York State, prime to choice.....	15,502,000	9,539,000
Pacific coast.....	32,575,000	20,270,000
Livestock, for food, 100 pounds:		
Cattle, steers—		
Choice to prime.....	41,449,000	45,450,000
Good to choice.....	82,898,000	90,901,000
Hogs—		
Heavy.....	19,110,000	32,775,000
Light.....	57,329,000	98,327,000
Sheep—		
Ewes, poor to best.....	2,300,000	2,259,000
Lambs, good to choice.....	8,049,000	7,906,000
Wethers, common to best.....	1,150,000	1,129,000
Peanuts, pounds.....	435,777,000	751,982,000
Poultry, live fowls, pounds:		
Chicago.....	230,400,000	299,223,000
New York.....	230,400,000	299,224,000
Tobacco, Burley, good leaf, 100 pounds.....	11,004,000	15,116,000

¹ See Bul. No. 320: Wholesale prices, 1890 to 1921, pp. 241-259; Bul. No. 335: Wholesale prices, 1890 to 1922, pp. 195-202.

Using the above list of commodities and the above weights, index numbers for the years from 1913 to 1921 have been computed as follows:

INDEX NUMBERS OF WHOLESALE PRICES OF FARM PRODUCTS (*UNREVISED LIST*),
1913 TO 1921

Computed with—	1913	1914	1915	1916	1917	1918	1919	1920	1921
1909 weights.....	100	103	105	122	189	220	234	218	120
1919 weights.....	100	103	105	122	189	220	233	215	121

From 1914 to 1918 the substitution of the new weights in place of the former figures made no difference in the results, notwithstanding the considerable difference in the old and new weights for certain commodities. In 1919, the year of peak prices for farm products, the index computed with the new weights fell one point below the old index. In 1920 the difference increased to three points, while in 1921 the use of the new weights brought the index one point higher than the old index.

A more striking test, perhaps, of the effect produced on the Bureau's index numbers by the change of weights is afforded by the group of building materials. The old index numbers, and the new numbers as given in the July, 1922, issue of the *MONTHLY LABOR REVIEW*, are as follows:

INDEX NUMBERS OF WHOLESALE PRICES OF BUILDING MATERIALS, FORMER
LIST AND *REVISED LIST*, 1913 TO 1921

Series	1913	1914	1915	1916	1917	1918	1919	1920	1921
Old series.....	100	97	94	101	124	151	192	308	196
New series.....	100	92	94	120	157	172	201	264	165

From the above table it is seen that the new index number was 5 points below the old series in 1914, that it increased to a maximum of 33 points above the old series in 1917, and that it sank to 44 points below the old series in 1920 and 31 points below the old series in 1921.

In seeking an explanation of the wide divergences here shown, the 1919 weights were applied to the list of building materials as it stood before revision. This list, together with the old and new weights, follows:

1909 AND 1919 WEIGHTING FACTORS OF BUILDING MATERIALS (*UNREVISED LIST*)

Commodity	1909 weights	1919 weights ¹
Brick, common, 1,000:		
Chicago, run-of-kiln, salmon.....	3,264,000	1,518,000
Cincinnati, red, building.....	3,264,000	1,518,000
New York, red, domestic, building.....	3,264,000	1,518,000
Cement, Portland, domestic, barrels:		
F. o. b. plant near Chicago.....	65,435,000	86,141,000
Glass:		
Plate, polished, glazing, square feet—		
3 to 5 square feet.....	24,861,000	28,808,000
5 to 10 square feet.....	24,861,000	28,808,000
Window, American, single, 50 square feet—		
A.....	3,461,000	3,689,000
B.....	3,461,000	3,689,000

¹ The 1919 weights, as published in Bul. 335, have been reallocated to conform to this list of commodities.

1909 AND 1919 WEIGHTING FACTORS OF BUILDING MATERIALS—Concluded

Commodity	1909 weights	1919 weights
Lath, 1,000:		
Eastern, spruce, 1½-inch slab	4,388,000	2,674,000
Lime, eastern, common, barrels	23,278,000	21,936,000
Lumber, 1,000 feet:		
Douglas fir—		
No. 1, common	3,642,000	4,427,000
No. 2 and better	1,214,000	1,476,000
Hemlock	3,051,000	1,755,000
Maple	1,107,000	858,000
Oak, white—		
Plain	1,471,000	903,000
Quartered	2,943,000	1,806,000
Pine—		
White, boards	3,900,000	1,724,000
Yellow—		
Flooring	10,173,000	8,164,000
Siding	6,104,000	4,899,000
Poplar	859,000	350,000
Spruce	1,749,000	980,000
Paint materials:		
Lead, carbonate, American, pounds	247,237,000	237,359,000
Linseed oil, raw, gallons	102,528,000	62,536,000
Turpentine, spirits, gallons	29,765,000	19,271,000
Zinc oxide, American, pounds	143,550,000	279,321,000
Putty, pounds	63,502,000	66,682,000
Rosin, common to good, strained, barrels	3,673,000	2,272,000
Shingles, 1,000:		
Cypress	1,387,000	1,182,000
Red cedar	12,005,000	10,258,000

Using the above list of commodities and the above weights index numbers for 1913 to 1921 were computed with the following results:

INDEX NUMBERS OF WHOLESALE PRICES OF BUILDING MATERIALS (UNREVISED LIST), 1913 TO 1921

Computed with—	1913	1914	1915	1916	1917	1918	1919	1920	1921
1909 weights	100	97	94	101	124	151	192	308	196
1919 weights	100	97	93	102	126	154	194	310	197

In this example the maximum change for any year due to the substitution of the 1919 weights in place of those for 1909 was three points. In three of the eight years since 1913 the difference was two points and in three years it was only one point.

From these two examples it may safely be concluded that the radical differences observed in the two series of index numbers are due in only small measure to the change from the 1909 to the 1919 weights. The rearrangement of commodities in the groups and, particularly, the addition of new commodities and the substitution of new price series for those formerly carried are more important causes. For instance, in 1920 (before revision) lumber in the New York market comprised 69½ per cent of the value of all building materials and, hence, dominated the group. In revising the building materials group in 1922, besides the inclusion of structural steel and other metal products, prices of lumber in other markets believed to be more truly representative were substituted for the New York City prices and all calculations were carried back to 1913, the base year. As prices in the substituted markets were found to have increased less since 1913 than had prices at New York, the effect of such substitu-

tions was to lower considerably the group index numbers. The following comparisons for the years 1913, 1921, and 1922 will illustrate the effect of the substitutions:

EFFECT OF SUBSTITUTIONS OF NEW PRICE SERIES ON INDEX NUMBERS OF CERTAIN BUILDING MATERIALS

Commodity	1913	1921	1922
Maple lumber:			
In old series	100	262	230
In new series	100	183	176
Oak lumber:			
In old series	100	212	215
In new series	100	160	182
Yellow pine flooring:			
In old series	100	210	212
In new series	100	156	197
Poplar lumber:			
In old series	100	213	217
In new series	100	177	180
Lath:			
In old series	100	206	204
In new series	100	136	164

In 1922, chiefly as a result of the change from New York to other markets for lumber and the inclusion of important metal products used in building, it was found that the lumber values corresponding to those formerly quoted at New York comprised less than 36 per cent of the value of all articles in the building materials group, in place of the 69 $\frac{3}{4}$ per cent before revision. This fact, together with the relatively low price of metals in 1920 and 1921, could not have failed to produce a lower trend for the revised index number of building materials.

From the tests conducted by the bureau it appears conclusive—

1. That, except in cases where there has been a radical change in weighting factors, the drop in the new index numbers in recent years, as compared with the older series, is due in only small measure to the use of the new weights.

2. That the differences between the two series are mainly due to two causes: (a) The substitution in the new series of commodities bearing a lower ratio to their 1913 basic prices than did the commodities which they displaced, and (b) the inclusion in the revised series of a number of commodities not found in the former series and which show comparatively small price increases since 1913.

Average Wholesale Prices of Commodities, January to March, 1924

IN CONTINUATION of information first published in the MONTHLY LABOR REVIEW for May, 1922, there are presented herewith the average prices in January, February, and March, 1924, of the more important commodities for which wholesale prices are collected by the Bureau of Labor Statistics. For convenience of comparison with pre-war prices, index numbers based on average prices in the year 1913 as 100, are shown in addition to the statement of absolute money prices.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>Farm products</i>						
(a) Grains:						
Barley, malting, per bushel, Chicago.....	\$0. 705	\$0. 740	\$0. 753	112. 7	118. 3	120. 3
Corn, per bushel, Chicago—						
Contract grades.....	. 759	. 797	. 796	121. 3	127. 5	127. 4
No. 3 mixed.....	. 747	. 777	. 769	121. 3	126. 2	124. 9
Oats, contract grades, per bushel, Chicago.....	. 474	. 493	. 481	126. 1	131. 2	127. 9
Rye, No. 2, per bushel, Chicago.....	. 725	. 720	. 685	114. 0	113. 1	107. 6
Wheat, per bushel—						
No. 1, northern spring, Chicago.....	1. 133	1. 174	1. 165	124. 1	128. 6	127. 6
No. 2, red winter, Chicago.....	1. 106	1. 127	1. 088	112. 2	114. 3	110. 3
No. 2, hard winter, Kansas City.....	1. 129	1. 121	1. 076	128. 8	127. 9	122. 8
No. 1, northern spring, Minneapolis.....	1. 151	1. 176	1. 163	131. 7	134. 7	133. 1
No. 1, hard white, Portland, Oreg.....	1. 024	1. 041	1. 030	110. 2	112. 1	110. 9
(b) Livestock and poultry:						
Cattle, steers, per 100 pounds, Chicago—						
Choice to prime.....	10. 550	10. 650	11. 355	118. 2	119. 3	127. 1
Good to choice.....	9. 469	9. 706	10. 065	111. 3	114. 1	118. 3
Hogs, per 100 pounds, Chicago—						
Heavy.....	7. 231	7. 075	7. 345	86. 4	84. 6	87. 8
Light.....	7. 169	7. 075	7. 370	84. 8	83. 7	87. 2
Sheep, per 100 pounds, Chicago—						
Ewes, native, all grades.....	7. 188	8. 425	9. 975	153. 4	179. 8	212. 8
Lambs, western, good to choice.....	13. 325	14. 550	15. 775	171. 0	186. 7	202. 4
Wethers, fed, good to choice.....	8. 731	9. 500	10. 950	163. 3	177. 7	204. 8
Poultry, live fowls, per pound—						
Chicago.....	. 194	. 219	. 244	126. 1	142. 0	158. 2
New York.....	. 266	. 270	. 281	158. 9	161. 3	168. 0
(c) Other farm products:						
Beans, medium, choice, per 100 pounds, New York.....	5. 725	5. 875	5. 813	143. 5	147. 3	145. 7
Clover seed, contract grades, per 100 pounds, Chicago.....	20. 800	21. 200	19. 500	125. 9	128. 4	118. 1
Cotton, middling, per pound—						
New Orleans.....	. 341	. 319	. 289	268. 7	251. 3	227. 2
New York.....	. 347	. 319	. 285	271. 4	249. 6	222. 5
Cotton seed, per ton, average price at gin.....	44. 370	43. 270	41. 340	203. 6	198. 6	189. 7
Eggs, fresh, per dozen—						
Firsts, western, Boston.....	. 437	. 381	. 251	173. 8	151. 6	99. 6
Firsts, Chicago.....	. 406	. 348	. 215	179. 9	154. 0	95. 0
Extra firsts, Cincinnati.....	. 444	. 359	. 233	198. 3	160. 4	103. 9
Candled, New Orleans.....	. 330	. 358	. 279	140. 8	152. 6	119. 0
Firsts, New York.....	. 421	. 393	. 247	169. 1	157. 6	99. 2
Extra firsts, western, Philadelphia.....	. 433	. 405	. 243	164. 1	153. 6	92. 0
Extra, pullets, San Francisco.....	. 335	. 259	. 234	125. 1	96. 6	87. 3
Flaxseed, No. 1, per bushel, Minneapolis.....	2. 478	2. 590	2. 470	183. 7	192. 0	183. 1
Hay, per ton—						
Alfalfa, No. 1, Kansas City.....	25. 250	23. 875	24. 900	178. 0	168. 3	175. 5
Clover, mixed, No. 1, Cincinnati.....	23. 200	22. 688	22. 750	148. 9	145. 6	146. 0
Timothy, No. 1, Chicago.....	27. 500	25. 000	25. 500	171. 6	156. 0	159. 1
Hides and skins, per pound—						
Calfskins, No. 1, country, Chicago.....	. 158	. 182	. 188	83. 4	96. 4	99. 7
Goatskins, Brazilian, New York.....	. 819	. 823	. 820	115. 1	115. 7	115. 3
Hides, heavy, country cows, No. 1, Chicago.....	. 086	. 088	. 081	57. 0	58. 4	53. 4
Hides, packers, heavy, native steers, Chicago.....	. 143	. 158	. 139	77. 5	85. 6	75. 5
Hides, packers, heavy, Texas steers, Chicago.....	. 128	. 150	. 128	70. 8	82. 9	70. 5
Hops, prime to choice, per pound—						
New York State, New York.....	. 540	. 570	. 570	202. 8	214. 0	214. 0
Pacific, Portland, Oreg.....	. 237	. 319	. 313	137. 9	185. 5	181. 8
Milk, fluid, per quart—						
Chicago.....	. 068	. 068	. 068	158. 4	158. 4	158. 4
New York.....	. 069	. 067	. 067	155. 5	151. 0	151. 0
San Francisco.....	. 068	. 068	. 068	158. 1	158. 1	158. 1
Onions, fresh, yellow, per 100 pounds, Chicago.....	2. 750	2. 369	2. 438	175. 0	150. 6	155. 1
Peanuts, No. 1, per pound, Norfolk, Va.....	. 055	. 056	. 056	155. 2	158. 6	156. 6
Potatoes—						
White, good to choice, per 100 pounds, Chicago.....	1. 435	1. 381	1. 256	140. 2	134. 9	122. 7
Sweet, No. 1, per five-eighths bushel, Philadelphia.....	1. 925	2. 165	2. 363	398. 9	448. 6	489. 5
Rice, per pound, New Orleans—						
Blue Rose, head, clean.....	. 046	. 047	. 049	(1)	(1)	(1)
Honduras, head, clean.....	. 056	. 057	. 055	111. 2	112. 2	109. 1
Tobacco, leaf, per 100 pounds—						
Burley, good leaf, dark red, Louisville, Ky.....	28. 000	28. 000	28. 000	212. 1	212. 1	212. 1
Average warehouse sales, Kentucky.....	19. 125	17. 655	14. 443	214. 7	198. 2	162. 1
Wool, Ohio, per pound, Boston—						
Fine clothing, scoured.....	1. 324	1. 351	1. 324	214. 4	218. 9	214. 4
Fine delaine, scoured.....	1. 333	1. 333	1. 333	242. 5	242. 5	242. 5
Half blood, scoured.....	1. 196	1. 217	1. 217	240. 3	244. 8	244. 8
One-fourth and three-eighths grades, scoured.....	. 982	1. 000	1. 000	205. 2	208. 8	208. 8

¹ No 1913 base price.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>Foods</i>						
(a) Meats:						
Beef, fresh, per pound—						
Carcass, good native steers, Chicago.....	\$0.170	\$0.170	\$0.170	131.3	131.3	131.3
Sides, native, New York.....	.160	.153	.158	127.4	121.8	126.3
Beef, salt, extra mess, per barrel (200 pounds), New York.....	16.500	16.500	15.500	87.2	87.2	81.9
Hams, smoked, per pound, Chicago.....	.193	.184	.189	116.1	110.9	113.6
Lamb, dressed, per pound, Chicago.....	.223	.240	.273	149.6	161.4	183.3
Mutton, dressed, per pound, New York.....	.145	.154	.178	141.5	150.0	173.2
Pork, fresh, per pound—						
Loins, Chicago.....	.144	.139	.156	96.8	93.5	105.2
Loins, western, New York.....	.160	.151	.153	105.1	99.1	100.1
Pork, cured—						
Mess, salt, per barrel (200 pounds), New York.....	24.700	24.500	25.063	109.9	109.0	111.5
Sides, rough, per pound, Chicago.....	.104	.106	.104	84.4	85.4	84.0
Sides, short, clear, per pound, Chicago.....	.108	.108	.109	84.6	84.9	85.4
Poultry, dressed, per pound—						
Hens, heavy, Chicago.....	.241	.248	.263	166.7	171.2	181.5
Fowls, 48-56 pounds to dozen, New York.....	.275	.292	.290	150.8	160.1	159.0
Veal, dressed, good, per pound, Chicago.....	.173	.173	.165	185.6	186.1	177.5
(b) Butter, cheese, and milk:						
Butter, creamery, extra, per pound—						
Boston.....	.531	.516	.475	167.4	162.8	149.7
Chicago.....	.524	.496	.449	168.7	159.9	144.6
Cincinnati ¹.....	.497	.468	.440	(1)	(1)	(1)
New Orleans.....	.567	.556	.533	168.7	165.5	158.4
New York.....	.531	.506	.473	164.5	157.0	146.5
Philadelphia.....	.540	.512	.465	165.7	157.1	142.6
St. Louis.....	.539	.503	.466	174.4	162.8	150.9
San Francisco.....	.516	.490	.480	162.7	154.5	151.4
Cheese, whole milk, per pound—						
American, twins, Chicago.....	.227	.215	.205	160.1	151.6	144.4
State, fresh flats, colored, average, New York.....	.205	.204	.198	132.7	132.6	128.6
California flats, fancy, San Francisco.....	.247	.243	.250	155.0	152.1	156.8
Milk, fluid. (See Farm products.)						
Milk, condensed, per case of 48 14-ounce tins, New York.....	6.285	6.300	6.275	133.7	134.0	133.5
Milk, evaporated, per case of 48 16-ounce tins, New York.....	4.610	4.638	4.569	130.4	131.2	129.3
(c) Other foods:						
Beans, medium, choice. (See Farm products.)						
Bread, per pound before baking—						
Chicago.....	.078	.075	.075	182.0	174.5	174.5
Cincinnati.....	.062	.062	.062	174.7	174.7	174.7
New Orleans.....	.058	.058	.058	190.8	190.8	190.8
New York.....	.069	.069	.071	162.5	162.5	166.5
San Francisco.....	.069	.069	.069	173.0	173.0	173.0
Cocoa beans, Arriba, per pound, New York.....	.136	.135	.140	89.0	88.2	91.3
Coffee, Rio, No. 7, per pound, New York.....	.109	.142	.156	97.6	127.2	140.5
Copra, South Sea, sun dried, per pound, New York.....	.056	.058	.057	53.4	55.2	54.7
Eggs, fresh, per dozen. (See Farm products.)						
Fish—						
Cod, large, shore, pickled, cured, per 100 pounds, Gloucester, Mass.....	8.500	8.250	8.000	126.7	123.0	119.3
Herring, large, split, per barrel (180-190 pounds), New York.....	9.500	9.500	9.500	143.4	143.4	143.4
Mackerel, salt, large, 3s, per barrel, Boston.....	12.375	12.870	13.365	111.5	116.0	120.4
Salmon, canned, Alaska, red, per dozen, factory.....	2.395	2.400	2.400	164.0	164.3	164.3
Flour, rye, white, per barrel, Minneapolis.....	4.095	4.050	3.663	131.1	129.7	117.3
Flour, wheat, per barrel—						
Winter patents, Kansas City.....	6.025	6.119	6.060	150.2	152.5	151.1
Winter straights, Kansas City.....	5.250	5.350	5.330	136.5	139.1	138.5
Standard patents, Minneapolis.....	6.195	6.306	6.300	135.2	137.6	137.4
Second patents, Minneapolis.....	6.020	6.088	6.050	136.1	137.7	136.8
Patents, Portland, Oreg.....	6.375	6.567	6.368	141.8	146.1	141.7
Patents, soft, winter, St. Louis.....	5.619	5.763	5.590	123.1	126.2	122.4
Straights, soft, winter, St. Louis.....	4.725	4.925	4.810	111.1	115.8	113.1
Patents, Toledo.....	5.281	5.369	5.245	111.8	113.6	111.0
Fruit, canned, per case, New York—						
Peaches, California, standard 24s.....	1.800	1.800	1.800	118.6	118.6	118.6
Pineapples, Hawaiian, sliced, standard 24s.....	3.325	3.325	3.325	162.0	162.0	162.0
Fruit, dried, per pound, New York—						
Apples, evaporated, State, choice.....	.142	.156	.163	198.2	217.7	226.3
Currants, Patras, cleaned.....	.115	.115	.116	150.1	150.1	151.7
Prunes, California, 60-70s.....	.075	.073	.069	113.6	111.4	105.8
Raisins, coast, seeded, bulk.....	.071	.071	.071	98.2	98.2	98.2

¹ No 1913 base price.² As to score.

[1003]

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>Foods—Concluded</i>						
(c) Other foods—Concluded						
Fruit, fresh—						
Apples, Baldwins, per barrel, Chicago.....	\$4. 225	\$4. 563	\$4. 313	133. 1	143. 8	135. 9
Bananas, Jamaica, 9s, per bunch, New York.....	2. 125	2. 125	2. 900	138. 1	138. 1	188. 5
Lemons, California, choice, per box, Chicago.....	3. 325	3. 531	3. 594	57. 6	61. 2	62. 3
Oranges, California, choice, per box, Chicago.....	4. 510	4. 031	4. 813	102. 0	91. 2	108. 9
Glucose, 42° mixing, per 100 pounds, New York.....	3. 356	3. 460	3. 560	157. 0	161. 9	166. 6
Hominy grits, bulk, car lots, per 100 pounds, f. o. b. mill.....	1. 600	1. 688	1. 638	96. 9	102. 2	99. 2
Lard, prime, contract, per pound, New York.....	. 128	. 117	. 116	116. 3	105. 8	104. 9
Meal, corn, per 100 pounds—						
White, f. o. b. mill.....	1. 550	1. 638	1. 588	96. 8	102. 3	99. 2
Yellow, Philadelphia.....	2. 263	2. 470	2. 500	157. 8	172. 3	174. 4
Molasses, New Orleans, fancy, per gallon, New York.....	. 615	. 615	. 615	161. 4	161. 4	161. 4
Oatmeal, car lots, in barrels (180 pounds), per 100 pounds, New York.....	3. 100	3. 278	3. 222	125. 3	132. 4	130. 2
Oleomargarine, standard, uncolored, per pound, Chicago.....	. 225	. 225	. 219	138. 5	138. 5	134. 5
Oleo oil, extra, per pound, Chicago.....	. 156	. 147	. 130	135. 4	127. 6	112. 7
Pepper, black, Singapore, per pound, New York.....	. 110	. 113	. 106	101. 4	103. 7	98. 0
Rice. (See Farm products.)						
Salt, American, medium, per barrel (280 pounds), Chicago.....	2. 490	2. 490	2. 490	244. 1	244. 1	244. 1
Sugar, per pound, New York—						
Granulated, in barrels.....	. 084	. 087	. 085	196. 3	203. 5	198. 8
Raw, 96° centrifugal.....	. 067	. 072	. 069	192. 0	206. 9	197. 4
Tallow, edible, per pound, Chicago.....	. 093	. 089	. 087	116. 2	112. 2	109. 2
Tea, Formosa, fine, per pound, New York.....	. 310	. 310	. 310	124. 8	124. 8	124. 8
Vegetables, canned—						
Corn, Maryland, standard, per dozen, New York.....	. 875	. 875	. 875	138. 0	138. 0	138. 0
Peas, State and western, No. 5, per dozen, New York.....	1. 350	1. 350	1. 350	155. 8	155. 8	155. 8
Tomatoes, New Jersey, standard, No. 3, per dozen, New York.....	1. 500	1. 500	1. 500	115. 4	115. 4	115. 4
Vegetables, fresh. (See Farm products.)						
Vegetable oil—						
Coconut, crude, per pound, New York.....	. 104	. 105	. 104	77. 1	78. 0	77. 1
Corn, crude, in barrels, per pound, New York.....	. 118	. 118	. 112	193. 6	193. 6	183. 7
Cottonseed, prime, summer, yellow, per pound, New York.....	. 110	. 101	. 098	151. 7	138. 8	135. 4
Olive oil, edible, in barrels, per gallon, New York.....	1. 760	1. 963	2. 000	104. 3	116. 2	118. 5
Peanut, crude, per pound, f. o. b. mill.....	. 120	. 120	. 120	(1)	(1)	(1)
Soya bean, crude, in barrels, per pound, New York.....	. 113	. 116	. 120	183. 8	188. 9	196. 1
Vinegar, cider, 40 grain, in barrels, per gallon, New York.....	. 210	. 200	. 200	188. 1	179. 1	179. 1
<i>Cloths and clothing</i>						
(a) Boots and shoes, per pair, factory:						
Children's—						
Little boys', gun metal, blucher.....	1. 615	1. 615	1. 615	166. 5	166. 5	166. 5
Child's, gun metal, polish, high cut, rubber heel.....	1. 663	1. 663	1. 663	181. 7	181. 7	181. 7
Misses', black, vici, polish, high cut, rubber heel.....	1. 948	1. 948	1. 948	173. 2	173. 2	173. 2
Youths', gun metal, blucher.....	1. 473	1. 473	1. 473	143. 4	143. 4	143. 4
Men's—						
Black, calf, blucher.....	6. 250	6. 250	6. 250	200. 8	200. 8	200. 8
Black, calf, Goodyear welt, bal.....	4. 850	4. 871	4. 900	153. 2	153. 8	154. 7
Black, dress, Goodyear welt, side leather.....	3. 150	3. 150	3. 150	140. 8	140. 8	140. 8
Gun metal, Goodyear welt, blucher.....	4. 350	4. 350	4. 350	222. 5	222. 5	222. 5
Mahogany, chrome, side, Goodyear welt, bal.....	3. 600	3. 600	3. 539	223. 3	223. 3	219. 4
Tan, dress, Goodyear welt, calf.....	4. 850	4. 850	4. 850	153. 2	153. 2	153. 2
Tan, dress, Goodyear welt, side leather.....	3. 350	3. 350	3. 350	149. 7	149. 7	149. 7
Chocolate, elk, blucher.....	1. 692	1. 692	1. 692	118. 8	118. 8	118. 8
Vici kid, black, Goodyear welt.....	6. 000	6. 000	6. 000	209. 3	209. 3	209. 3
Women's—						
Black, kid, Goodyear welt, 8½-inch lace.....	3. 850	3. 850	3. 850	141. 7	141. 7	141. 7
Colored, calf, Goodyear welt, lace oxford.....	4. 150	4. 150	4. 150	190. 9	190. 9	190. 9
Kid, black, McKay sewed, lace oxford.....	3. 500	3. 500	3. 500	235. 0	235. 0	235. 0
Patent leather pump, McKay sewed.....	3. 600	3. 600	3. 600	261. 8	261. 8	261. 8

1 No 1913 base price.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>Cloths and clothing—Concluded</i>						
(b) Cotton goods, factory:						
Denims, Massachusetts, 2.20 yards to the pound, per yard	\$0.272	\$0.253	\$0.248	211.6	196.6	192.9
Drillings, brown, per yard—						
Massachusetts, D standard, 30-inch	.184	.178	.176	222.0	214.8	212.6
Pepperell, 29-inch, 2.85 yards to the pound	.200	.199	.185	243.0	241.8	224.8
Flannels, per yard—						
Colored, 4.20 yards to the pound	.161	.150	.150	220.7	205.6	205.6
Unbleached, 3.20 yards to the pound	.214	.200	.200	239.1	223.1	223.1
Ginghams, per yard—						
Amoskeag, 27-inch, 6.37 yards to the pound	.125	.125	.125	192.3	192.3	192.3
Lancaster, 26½-inch, 6.50 yards to the pound	.144	.144	.144	233.0	233.0	233.0
Hosiery, per dozen pairs—						
Men's half hose, combed yarn	1.900	1.900	1.800	236.2	236.2	223.7
Women's cotton, silk mercerized, mock seam	2.550	2.550	2.550	144.0	144.0	144.0
Women's combed yarn, 16-ounce	1.764	1.764	1.764	176.4	176.4	176.4
Muslin, bleached, 4/4, per yard—						
Fruit of the Loom	.195	.192	.181	228.4	225.4	211.6
Lonsdale	.176	.175	.167	218.3	216.2	206.2
Rough Rider	.155	.153	.149	193.5	190.5	185.2
Wamsutta nainsook	.235	.235	.235	255.3	255.3	255.3
Print cloth, 27-inch, 7.60 yards to the pound, per yard	.077	.071	.066	222.9	204.6	192.2
Sheeting, brown, 4/4, per yard—						
Indian Head, 2.85 yards to the pound	.180	.180	.160	213.8	213.8	190.0
Pepperell, 3.75 yards to the pound	.165	.160	.155	225.1	217.9	211.5
Ware shoals, 4 yards to the pound	.129	.125	.121	210.3	204.2	196.4
Thread, 6-cord, J. & P. Coats, per spool	.058	.058	.058	148.7	148.7	148.7
Underwear—						
Men's shirts and drawers, per dozen garments	8.125	8.125	8.125	227.2	227.2	227.2
Women's union suits, combed yarn, per dozen	13.500	13.500	13.500	197.0	197.0	197.0
Yarn, per pound—						
Carded, white, mulespun, northern, 10/1, cones	.517	.491	.453	233.4	221.6	204.9
Carded, white, mulespun, northern, 22/1, cones	.552	.522	.483	223.0	210.7	194.9
Twisted, ordinary, weaving, 20/2	.532	.491	.457	228.8	211.2	196.5
Twisted, ordinary, weaving, 40/2	.652	.616	.590	170.3	160.9	153.9
(c) Woolen and worsted goods, factory:						
Flannel, white, 4/4, Ballard Vale, No. 3, per yard	1.000	1.000	1.000	215.8	215.8	215.8
Overcoating, 30 to 31-ounce, per yard	2.900	2.900	3.000	(1)	(1)	(1)
Suiting, per yard—						
Clay, worsted, diagonal, 16-ounce	3.015	3.015	3.015	218.2	218.2	218.2
Middlesex, wool-dyed, blue, 16-ounce	3.690	3.690	3.690	238.8	238.8	238.8
Serge, 9½-ounce	1.395	1.395	1.395	219.0	219.0	219.0
Serge, 11-ounce	2.408	2.408	2.408	212.9	212.9	212.9
Trousing, cotton warp, 11/11½-ounce, per yard	1.700	1.700	1.700	150.2	150.2	150.2
Underwear—						
Merino, shirts and drawers, per dozen gar- ments	33.000	33.000	33.000	168.5	168.5	168.5
Men's union suits, 33 per cent worsted, per dozen	29.400	29.400	29.400	290.5	290.5	290.5
Women's dress goods, per yard—						
Broadcloth, 9½-ounce, 54-56-inch	2.325	2.325	2.325	176.7	176.7	176.7
French serge, 35-inch	.775	.775	.775	234.9	234.9	234.9
Poplar cloth, cotton warp	.365	.365	.365	192.1	192.1	192.1
Scilian cloth, cotton warp, 50-inch	.635	.635	.635	196.3	196.3	196.3
Storm serge, double warp, 50-inch	1.035	1.035	1.035	184.0	184.0	184.0
Yarn, per pound—						
Crossbred stock, 2/32s	1.700	1.700	1.650	218.9	218.9	212.4
Half blood, 2/40s	2.150	2.150	2.200	192.6	192.6	197.1
Fine, domestic, 2/50s	2.400	2.400	2.450	227.7	227.7	232.4
(d) Silk, etc.:						
Linen shoe thread, 10s, Barbour, per pound, New York	1.777	1.777	1.777	198.9	198.9	198.9
Silk, raw, per pound—						
China, Canton, flature, extra A, New York	7.487	6.870	5.988	214.0	196.3	171.1
Japan, Kansai, No. 1, New York	7.350	6.860	6.223	201.9	188.5	171.0
Japan, special, extra extra, New York	7.644	7.154	6.468	187.7	175.6	158.7
Silk yarn, per pound, New York—						
Domestic, gray, spun, 60/1	4.959	4.900	4.655	170.0	168.0	159.6
Domestic, gray spun, 60/2, No. 1	6.056	5.880	5.635	174.7	169.6	162.5

¹ No 1913 base price.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>Fuel and lighting</i>						
(a) Anthracite coal, per gross ton, New York, tide-water:						
Broken.....	\$10.676	\$10.776	\$10.783	240.1	242.4	242.5
Chestnut.....	11.469	11.473	11.478	215.8	215.9	216.0
Egg.....	11.450	11.479	11.483	226.1	226.7	226.8
Stove.....	11.472	11.471	11.485	226.7	226.6	226.9
(b) Bituminous coal:						
Mine run, per net ton, Chicago.....	4.450	4.450	4.528	(1)	(1)	(1)
Prepared sizes, per net ton, Chicago.....	4.950	4.895	4.760	(1)	(1)	(1)
Screenings, per net ton, Chicago.....	3.263	3.000	3.350	(1)	(1)	(1)
Mine run, Kanawaha, per net ton, Cincinnati.....	3.640	3.640	3.390	165.5	165.5	154.1
Mine run, smokeless, New River, per net ton, Cincinnati.....	3.990	4.490	4.490	165.4	186.1	186.1
Mine run, Pocahontas, per gross ton, Norfolk, Va.....	5.000	4.750	4.750	166.7	158.3	158.3
Prepared sizes, per net ton, Pittsburgh.....	4.250	4.250	4.250	(1)	(1)	(1)
(c) Other fuel and lighting:						
Coke, Connellsville, furnace, per net ton, at oven.....	4.025	4.194	4.181	165.0	171.9	171.4
Gasoline, motor, per gallon, New York.....	.165	.200	.198	98.0	118.8	117.6
Matches, average of several brands, per gross, New York.....	1.540	1.540	1.540	189.7	189.7	189.7
Crude petroleum, per barrel, at well—						
California, 20°.....	.673	.973	1.010	192.1	277.9	288.6
Kansas-Oklahoma.....	1.244	1.513	1.670	133.1	161.9	178.8
Pennsylvania.....	3.300	4.000	4.000	134.7	163.3	163.3
Refined petroleum, per gallon, New York—						
Standard white, 110° fire test.....	.140	.140	.140	162.2	162.2	162.2
Water white, 150° fire test.....	.220	.220	.220	178.4	178.4	178.4
<i>Metals and metal products</i>						
(a) Iron and steel:						
Iron ore, per ton, lower lake ports—						
Mesabi, Bessemer, 55 per cent.....	6.200	6.200	6.200	149.4	149.4	149.4
Non-Bessemer, 51½ per cent.....	5.550	5.550	5.550	163.2	163.2	163.2
Pig iron, per gross ton—						
Basic, valley furnace.....	21.200	22.000	21.938	144.2	149.6	149.2
Bessemer, Pittsburgh.....	24.760	25.260	25.135	144.5	147.4	146.7
Foundry, No. 2, northern, Pittsburgh.....	24.160	24.760	24.760	150.9	154.7	154.7
Foundry, No. 2, Birmingham, Ala.....	21.500	22.500	22.500	183.9	192.4	192.4
Ferromanganese, per gross ton, seaboard.....	108.700	107.500	107.500	186.5	184.4	184.4
Spiegeleisen, 18 and 22 per cent, per gross ton, furnace.....	38.800	38.800	39.000	155.2	155.2	156.0
Bar iron, per pound—						
Best refined, Philadelphia.....	.034	.034	.032	177.1	177.1	166.1
Common, Pittsburgh.....	.031	.031	.031	189.7	189.7	189.7
Bars, reinforcing, per 100 pounds, Pittsburgh.....	2.400	2.400	2.400	174.4	174.4	174.4
Nails, wire, per 100 pounds, Pittsburgh.....	3.100	3.100	3.100	170.4	170.4	170.4
Pipe, cast-iron, 6-inch, per net ton, New York.....	62.600	62.600	62.600	267.9	267.9	267.9
Skelp, grooved, per 100 pounds, Pittsburgh.....	2.350	2.313	2.300	169.1	166.4	165.5
Steel billets, per gross ton, Pittsburgh—						
Bessemer.....	40.000	40.000	40.000	155.1	155.1	155.1
Open hearth.....	40.000	40.000	40.000	153.3	153.3	153.3
Steel, merchant bars, per 100 pounds, Pittsburgh.....	2.400	2.400	2.400	155.0	155.0	155.0
Steel plates, tank, per pound, Pittsburgh.....	.025	.025	.024	168.9	165.5	161.5
Steel rails, per gross ton, Pittsburgh—						
Bessemer, standard.....	43.000	43.000	43.000	153.6	153.6	153.6
Open hearth, standard.....	43.000	43.000	43.000	143.3	143.3	143.3
Steel, sheets, black, per pound, Pittsburgh.....	.038	.038	.038	172.6	173.5	171.7
Steel, structural shapes, per 100 pounds, Pittsburgh.....	2.500	2.500	2.500	165.5	165.5	165.5
Terneplate, 8 pounds I. C., per base box (200 pounds), Pittsburgh.....	11.300	11.300	11.300	162.9	162.9	162.9
Tin plate, domestic coke, per 100 pounds, Pittsburgh.....	5.500	5.500	5.500	154.6	154.6	154.6
Wire, per 100 pounds—						
Barbed, galvanized, Chicago.....	4.140	4.140	4.140	179.3	179.3	179.3
Plain, fence, annealed, Pittsburgh.....	2.900	2.900	2.900	191.7	191.7	191.7
(b) Nonferrous metals:						
Aluminum, per pound, New York.....	.268	.270	.275	113.4	114.2	116.3
Copper, ingot, electrolytic, per pound, refinery.....	.126	.128	.137	80.1	81.1	87.0
Copper, sheet, per pound, New York.....	.197	.198	.200	92.9	93.3	94.4
Copper wire, bare, per pound, mill.....	.155	.156	.165	92.3	93.2	98.3
Lead, pig, per pound, New York.....	.083	.090	.093	187.5	203.4	211.1
Lead pipe, per 100 pounds, New York.....	9.496	9.587	10.530	186.9	188.6	207.2
Quicksilver, per pound, New York.....	.793	.787	.859	140.4	139.2	152.0
Silver, bar, fine, per ounce, New York.....	.638	.647	.643	104.1	105.6	105.0
Tin, pig, per pound, New York.....	.485	.529	.551	108.1	117.8	122.8
Zinc, sheet, per 100 pounds, factory.....	8.725	8.930	8.970	120.4	123.3	123.8
Zinc, slab, per pound, New York.....	.068	.071	.069	116.0	122.5	118.0

¹ No 1913 base price.

² Estimated.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>Building materials</i>						
(c) Lumber:						
Douglas fir, per 1,000 feet, mill—						
No. 1 common, boards.....	\$19.500	\$19.500	\$18.500	211.8	211.8	200.9
No. 2 and better, drop siding.....	33.000	35.000	31.000	190.4	201.9	178.8
Gum, sap, firsts and seconds, per 1,000 feet, St. Louis.....	55.300	58.250	58.500	267.4	281.7	282.7
Hemlock, northern, No. 1, per 1,000 feet, Chicago.....	37.500	37.500	37.500	177.8	177.8	177.8
Maple, hard, No. 1 common, 4/4, per 1,000 feet, Chicago.....	72.500	73.250	75.500	240.6	243.0	250.5
Oak, white, plain, No. 1 common, 4/4, per 1,000 feet, Cincinnati.....	63.000	60.000	62.500	170.3	162.2	168.9
Pine, white, No. 2 barn, per 1,000 feet, Buffalo, N. Y.	62.200	62.000	62.000	212.7	212.1	212.1
Pine, yellow, southern, per 1,000 feet, mill—						
Boards, No. 2 common, 1 x 8.....	24.610	24.610	24.370	193.2	193.2	191.4
Flooring, B and better.....	44.280	44.540	43.900	192.2	193.3	191.0
Timbers, square edge and sound.....	26.440	26.930	27.020	180.7	184.0	184.6
Poplar, No. 1 common, 4/4, per 1,000 feet, Cincinnati.....	64.000	65.000	65.000	193.8	196.8	196.8
Spruce, eastern, random, per 1,000 feet, Boston.....	39.000	39.000	38.313	179.9	179.9	176.7
Lath, yellow pine, No. 1, per 1,000, mill.....	3.930	4.230	4.150	129.3	139.1	136.5
Shingles—						
Cypress, 16 inches long, per 1,000, mill.....	6.000	6.000	6.000	169.4	169.4	169.4
Red cedar, 16 inches long, per 1,000, mill.....	3.060	3.100	3.090	155.6	157.6	157.1
(b) Brick, common building, per 1,000:						
Simple average of 82 yard prices.....	14.617	14.587	14.560	215.2	214.8	214.3
Run of kiln, f. o. b. plant, Chicago.....	9.200	8.470	8.570	186.3	171.5	173.6
(c) Structural steel. (See Metals and metal products.)						
(d) Other building materials:						
Cement, Portland, per barrel, f. o. b. plant—						
Simple average of 6 plant prices in Pa., Ind., Minn., Tex., and Calif.....	1.827	1.833	1.842	175.9	176.4	177.2
Buffington, Ind.....	1.715	1.750	1.750	169.6	173.1	173.1
Northampton, Pa.....	1.750	1.750	1.750	196.6	196.6	196.6
Crushed stone, 1½", per cubic yard, New York.....	1.650	1.750	1.750	183.3	194.4	194.4
Gravel, per ton, f. o. b. pit, average of 27 plant prices.....	1.001	1.005	.990	202.3	203.3	200.2
Hollow tile, building, per block, Chicago.....	.072	.064	.064	113.1	100.0	100.0
Lime, common, lump, per ton, f. o. b. plant, average of 15 plant prices.....	9.714	9.674	9.745	235.3	234.5	236.1
Roofing, prepared, per square, f. o. b. factory—						
Medium weight.....	1.579	1.666	1.697	(1)	(1)	(1)
Shingles, individual.....	4.753	5.140	5.259	(1)	(1)	(1)
Shingles, strip.....	4.656	5.126	5.092	(1)	(1)	(1)
Slate surfaced.....	1.772	1.880	1.908	(1)	(1)	(1)
Sand, building, per ton, f. o. b. pit, average of 31 plant prices.....	.677	.683	.678	177.7	179.3	178.0
Slate, roofing, per 100 square feet, f. o. b. quarry.....	10.500	10.500	10.500	227.0	227.0	227.0
Glass plate—						
3 to 5 square feet, per square foot, New York.....	.550	.550	.550	232.4	232.4	232.4
5 to 10 square feet, per square foot, New York.....	.730	.730	.730	229.3	229.3	229.3
Glass, window, American, f. o. b. works—						
Single A, per 50 square feet.....	4.275	4.275	4.275	188.0	188.0	188.0
Single B, per 50 square feet.....	3.612	3.612	3.612	162.7	162.7	162.7
Linseed oil, per gallon, New York.....	.915	.928	.926	198.0	200.7	200.4
Putty, commercial, per pound, New York.....	.040	.040	.043	150.9	150.9	162.3
Rosin, common to good (B), per barrel, New York.....	5.770	5.800	5.725	119.8	120.4	118.9
Turpentine, southern, barrels, per gallon, New York.....	1.007	1.022	1.024	235.2	238.8	239.3
White lead, American, in oil, per pound, New York.....	.137	.146	.150	201.9	215.4	221.9
Zinc oxide (white zinc), per pound, New York.....	.070	.070	.070	130.1	130.1	130.1
Pipe, cast-iron. (See Metals and metal products.)						
Copper, sheet. (See Metals and metal products.)						
Copper wire. (See Metals and metal products.)						
Lead pipe. (See Metals and metal products.)						
Nails. (See Metals and metal products.)						
Reinforcing bars. (See Metals and metal products.)						
Roofing tin (terneplate). (See Metals and metal products.)						
Zinc, sheet. (See Metals and metal products.)						
<i>Chemicals and drugs</i>						
(a) Chemicals:						
Acids, per pound, New York—						
Acetic, 27 per cent.....	.034	.034	.034	174.2	174.2	174.2
Muratic, 20°.....	.010	.010	.009	76.9	76.9	70.0
Nitric, 42°.....	.053	.053	.050	107.6	107.6	101.4
Stearic, triple pressed.....	.133	.133	.132	100.0	100.0	99.5
Sulphuric, 66°.....	.008	.007	.007	75.0	73.0	70.0

¹ No 1913 base price.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Continued

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>Chemicals and drugs—Concluded</i>						
(a) Chemicals—Concluded						
Alcohol, per gallon, New York						
Denatured, No. 5, 188 proof	\$0.515	\$0.515	\$0.515	140.8	140.8	140.8
Wood, refined, 95 per cent	.880	.880	.880	184.0	184.0	184.0
Alum, lump, per pound, New York	.035	.035	.035	200.0	200.0	200.0
Ammonia, anhydrous, per pound, New York	.300	.300	.300	120.0	120.0	120.0
Bleaching powder, per 100 pounds, New York	1.500	1.625	1.840	127.0	137.7	155.7
Borax, crystals and granulated, per pound, New York	.055	.055	.055	146.7	146.7	146.7
Copper, sulphate, 99 per cent crystals, per pound, New York	.047	.047	.049	89.3	89.8	93.7
Copra, South Sea. (See Foods.)						
Formaldehyde, per pound, New York	.108	.110	.110	127.4	130.3	130.3
Oil, vegetable—						
Coconut, crude. (See Foods.)						
Corn, crude. (See Foods.)						
Palm kernel, crude, per pound, New York	.093	.093	.091	91.6	91.6	89.6
Soya bean, crude. (See Foods.)						
Potash, caustic, 88-92 per cent, per pound, New York	.064	.066	.069	179.8	184.1	192.7
Sal soda, per 100 pounds, New York	1.100	1.100	1.100	183.3	183.3	183.3
Soda ash, 58 per cent, light, per 100 pounds, New York	2.290	2.290	2.290	392.6	392.6	392.6
Soda, bicarbonate, American, per pound, f. o. b. works	.018	.018	.018	175.0	175.0	175.0
Soda, caustic, 76 per cent solid, per pound, New York	.038	.038	.038	257.5	257.5	257.5
Soda, silicate of, 40°, per 100 pounds, New York	.800	.800	.800	125.8	125.8	125.8
Sulphur, crude, per gross ton, New York	14.000	14.000	14.000	63.6	63.6	63.6
Tallow, inedible, packers' prime, per pound, Chicago	.085	.081	.081	120.6	114.0	114.0
(b) Fertilizer materials:						
Acid phosphate, 16 per cent basis, bulk, per ton, New York	8.125	7.844	7.750	105.6	101.9	100.7
Ammonia, sulphate, double bags, per 100 pounds, New York	2.840	2.850	2.850	90.8	91.2	91.2
Ground bone, steamed, per ton, Chicago	22.000	22.000	21.600	109.4	109.4	107.3
Muriate of potash, 80-85 per cent, K. C. L. bags, per ton, New York	31.095	31.095	31.095	82.1	82.1	82.1
Phosphate rock, 68 per cent, per ton, f. o. b. mines	3.250	2.500	2.250	95.4	73.4	69.0
Soda, nitrate, 95 per cent, per 100 pounds, New York	2.471	2.470	2.468	100.1	100.0	100.0
Tankage, 9 and 20 per cent, crushed, per ton, f. o. b. Chicago	26.469	25.625	25.805	113.3	109.7	110.5
(c) Drugs and pharmaceuticals:						
Acid, citric, domestic, crystals, per pound, New York	.480	.480	.480	110.2	110.2	110.2
Acid, tartaric, crystals, U. S. P., per pound, New York	.300	.300	.300	98.3	98.3	98.3
Alcohol, grain, 100 proof, U. S. P., per gallon, New York	4.780	4.780	4.780	191.3	191.3	191.3
Cream of tartar, powdered, per pound, New York	.251	.228	.225	105.3	95.5	94.1
Epsom salts, U. S. P., in barrels, per 100 pounds, New York	2.500	2.500	2.500	227.3	227.3	227.3
Glycerine, refined, per pound, New York	.165	.165	.165	83.7	83.7	83.7
Opium, natural, U. S. P., per pound, New York	8.000	8.500	9.000	133.0	141.3	149.6
Peroxide of hydrogen, 4-ounce bottles, per gross, New York	8.000	8.000	8.000	200.0	200.0	200.0
Phenol, U. S. P. (carbolic acid), per pound, New York	.365	.370	.346	332.1	336.8	315.0
Quinine, sulphate, manufacturers' quotations, per ounce, New York	.500	.500	.500	227.7	227.7	227.7
<i>House-furnishing goods.</i>						
(a) Furniture:						
Bedroom—						
Bed, combination, per bed, factory	32.000	32.000	32.000	142.2	142.2	142.2
Chair, all gum, cane seat, per chair, factory	4.500	4.500	4.500	200.0	200.0	200.0
Chiffonette, combination, per chiffonette, factory	36.000	36.000	36.000	110.8	110.8	110.8
Dresser, combination, per dresser, factory	51.000	51.000	49.000	141.7	141.7	136.1
Rocker, quartered oak, per chair, Chicago	4.900	4.900	4.900	239.0	239.0	239.0
Set, 3 pieces, per set, Chicago	35.868	35.868	35.868	188.9	188.9	188.9
Dining room—						
Buffet, combination, per buffet, factory	50.000	50.000	48.000	116.3	116.3	111.6
Chair, all gum, leather slip seat, per 6, factory	33.000	33.000	33.000	220.0	220.0	220.0
Table, extension, combination, per table, factory	30.000	30.000	30.000	162.2	162.2	162.2

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Concluded

Commodity	Average prices			Index numbers (1913=100)		
	Jan., 1924	Feb., 1924	Mar., 1924	Jan., 1924	Feb., 1924	Mar., 1924
<i>House-furnishing goods—Concluded</i>						
(a) Furniture—Concluded						
Living room—						
Davenport, standard pattern, per davenport, factory	\$63.000	\$63.000	\$63.000	182.6	182.6	182.6
Table, library, combination, per table, factory	32.000	32.000	32.000	160.0	160.0	160.0
Kitchen—						
Chair, hardwood, per dozen, Chicago	17.640	17.640	17.640	276.9	276.9	276.9
Refrigerator, lift-top type, each, factory	17.720	17.720	17.720	171.5	171.5	171.5
Table, with drawer, per table, Chicago	4.263	4.263	4.263	300.0	300.0	300.0
(b) Furnishings:						
Blankets, factory—						
Cotton, colored, 2 pounds to the pair, per pair	1.570	1.570	1.570	259.5	259.5	259.5
Wool, 4 to 5 pounds to the pair, per pound	1.313	1.313	1.313	171.7	171.7	171.7
Carpets, per yard, factory—						
Axminster, Bigelow	3.312	3.312	3.312	247.2	247.2	247.2
Brussels, Bigelow	3.024	3.024	3.024	234.1	234.1	234.1
Wilton, Bigelow	5.040	5.040	5.040	209.3	209.3	209.3
Cutlery—						
Carvers, 8-inch, per pair, factory	1.600	1.600	1.350	213.3	213.3	180.0
Knives and forks, per gross, factory	15.000	15.000	15.000	260.9	260.9	260.9
Pails, galvanized iron, 10-quart, per gross, factory	21.095	22.890	23.413	143.8	156.1	159.6
Sheeting, bleached, 10/4 factory—						
Pepperell, per yard	.527	.527	.527	220.1	220.1	220.1
Wamsutta, P. L., per yard	1.140	1.140	1.140	294.5	294.5	294.5
Tableware—						
Glass nappies, 4-inch, per dozen, factory	.220	.220	.220	200.0	200.0	200.0
Glass pitchers, 1/2-gallon, per dozen, factory	2.400	2.500	2.500	300.0	312.5	312.5
Glass tumblers, 1/2-pint, per dozen, factory	.220	.200	.200	183.3	166.7	166.7
Plates, white granite, 7-inch, per dozen, factory	1.050	1.050	1.050	226.6	226.6	226.6
Teacups and saucers, white granite, per dozen, factory	1.350	1.350	1.350	236.8	236.8	236.8
Ticking, Amoskeag, A. C. A., 2.85 yards to the pound, per yard, factory	.295	.290	.280	219.2	208.0	208.0
Tubs, galvanized iron, No. 3, per dozen, factory	6.582	7.135	7.298	160.3	173.7	177.7
(a) Cattle feed:						
Bran, per ton, Minneapolis	25.050	23.656	22.188	136.4	128.8	120.8
Cottonseed meal, prime, per ton, New York	43.250	40.250	39.250	152.8	142.1	137.7
Linsed meal, per ton, New York	43.750	42.000	42.000	154.0	147.8	147.8
Milfeed, middlings, standard, per ton, Minneapolis	25.300	24.063	21.750	180.1	123.7	111.8
(b) Leather:						
Calf, chrome, B grade, per square foot, Boston	.440	.460	.460	163.2	170.6	170.6
Glazed kid, black, top grade, per square foot, Boston	.675	.675	.675	269.6	269.6	269.6
Harness, California oak, No. 1, per pound, Chicago	.421	.421	.421	105.0	105.0	105.0
Side, black, chrome, B grade, per square foot, Boston	.250	.250	.250	97.7	97.7	97.7
Sole, per pound—						
Oak, in sides, middle weight, tannery run, Boston	.340	.340	.340	114.0	114.0	114.0
Oak, scoured backs, heavy, Boston	.440	.460	.460	98.0	98.0	102.5
Union, middle weight, New York	.414	.425	.425	103.2	105.9	105.9
(c) Paper and pulp:						
Paper—						
Newsprint, roll, per pound, f. o. b. mill	.039	.039	.039	187.6	187.6	187.6
Wrapping, manila, No. 1, jute, per pound, New York	.094	.094	.094	192.2	192.2	192.2
Wood pulp, sulphite, domestic, unbleached, per 100 pounds, New York	2.610	2.625	2.625	117.3	118.0	118.0
(d) Other miscellaneous:						
Hemp, manila, fair, current shipment, per pound, New York	.110	.113	.110	119.0	121.6	118.8
Jute, raw, medium grade, per pound, New York	.060	.055	.058	89.7	82.2	86.0
Lubricating oil, paraffin, 903 gravity, per gallon, New York	.195	.200	.200	136.8	140.4	140.4
Rope, pure manila, best grade, per pound, New York	.174	.170	.155	118.6	115.9	126.1
Rubber, Para, island, fine, per pound, New York	.199	.191	.171	24.7	23.6	21.2
Sisal, Mexican, current shipment, per pound, New York	.066	.066	.066	153.5	153.5	153.5
Soap—						
Laundry, per 100 cakes, Cincinnati	4.111	4.125	4.125	133.3	133.8	133.8
Laundry, per 100 cakes, Philadelphia	4.851	4.851	4.851	137.5	137.5	137.5
Starch, laundry, bulk, per pound, New York	.051	.051	.055	140.5	140.5	150.7
Tobacco—						
Plug, per pound, New York	.701	.696	.696	180.2	179.0	179.0
Smoking, per gross, 1-ounce bags, New York	9.920	8.320	8.320	175.9	147.5	147.5

Changes in Cost of Living in the United States

THE Bureau of Labor Statistics has secured data on cost of living for March, 1924. These data, together with what have been given in previous reports, are shown in the tables following. The information is based on actual prices secured from merchants and dealers for each of the periods named. The prices of food and of fuel and light (which include coal, wood, gas, electricity, and kerosene) are furnished the bureau in accordance with arrangements made with establishments through personal visits of the bureau's agents. In each city food prices are secured from 15 to 25 merchants and dealers, and fuel and light prices from 10 to 15 firms, including public utilities. All other data are secured by special agents of the bureau who visit the various merchants, dealers, and agents and secure the figures directly from their records. Four quotations are secured in each city (except in Greater New York, where five are obtained) on each of a large number of articles of clothing, furniture, and miscellaneous items. Rental figures are secured for from 400 to 2,000 houses and apartments in each city, according to its population.

Table 1 shows the changes in the total cost of living from June, 1920, March, 1923, and December, 1923, respectively, to March, 1924, in 32 cities, and in the United States as determined by a consolidation of the figures for the 32 cities.

TABLE 1.—CHANGES IN TOTAL COST OF LIVING IN SPECIFIED CITIES FROM JUNE, 1920, MARCH, 1923, AND DECEMBER, 1923, TO MARCH, 1924

City	Per cent of decrease from June, 1920, to March, 1924	Per cent of increase from March, 1923, to March, 1924	Per cent of decrease from Decem- ber 1923, to March, 1924	City	Per cent of decrease from June, 1920, to March, 1924	Per cent of increase from March, 1923, to March, 1924	Per cent of decrease from Decem- ber, 1923, to March, 1924
Atlanta.....	22.4	¹ 0.7	1.9	Mobile.....	22.9	0.9	1.9
Baltimore.....	19.8	1.0	1.7	New Orleans.....	16.3	1.0	1.2
Birmingham.....	19.5	1.2	1.5	New York.....	21.2	.3	2.6
Boston.....	21.9	.4	2.8	Norfolk.....	23.1	.8	.9
Buffalo.....	20.9	1.5	2.0	Philadelphia.....	19.5	1.2	1.6
Chicago.....	19.9	2.4	1.0	Pittsburgh.....	19.0	1.0	1.7
Cincinnati.....	20.3	2.6	.4	Portland, Me.....	21.0	¹ 2.2	1.7
Cleveland.....	19.5	2.3	1.3	Portland, Oreg.....	22.5	.5	1.6
Denver.....	21.2	¹ 1.0	2.9	Richmond.....	19.7	1.0	1.4
Detroit.....	22.5	2.0	.9	St. Louis.....	19.8	1.8	1.0
Houston.....	21.0	.7	1.7	San Francisco.....	19.4	1.0	2.5
Indianapolis.....	20.5	¹ 1.3	1.0	Savannah.....	26.4	¹ 1.8	1.2
Jacksonville.....	21.6	1.4	1.3	Scranton.....	18.9	1.1	2.3
Kansas City.....	23.3	1.2	1.2	Seattle.....	21.0	2.7	1.3
Los Angeles.....	12.0	2.6	.8	Washington.....	20.6	1.1	2.0
Memphis.....	18.4	¹ 1.1	1.2				
Minneapolis.....	17.8	.1	.8	Average, U. S.....	21.3	.9	1.6

¹ Decrease.

Table 2 shows the changes in each of six groups of items in 19 cities from December, 1914, to March, 1924.

In studying this and the following tables it should be borne in mind that the figures for the 19 cities in Table 2 are based on the prices prevailing in December, 1914, the figures for the 13 cities in Table 3 are based on the prices prevailing in December, 1917, while the figures for the United States, shown in Table 4, are a summarization of the figures in Tables 2 and 3, computed on a 1913 base.

It will be noted that from the beginning of the studies to June, 1920, there was, with an occasional exception, a steady increase in prices, becoming much more decided during the latter part of that period. From June, 1920, to March, 1922, there was a decrease during each period covered by the tables. During the latter part of this time the decreases were very small. From March to June, 1922, and from June to September of the same year the changes were small, being increases in some cities and decreases in others. From September to December, 1922, an increase was shown in each of the 32 cities.

From December, 1922, to March, 1923, the changes ranged from a decrease of 2.9 per cent to an increase of 0.8 per cent, the average for the United States being a decrease of 0.4 per cent.

During the period from March to June, 1923, the changes ranged from a decrease of 0.9 per cent to an increase of 2.8 per cent, the average for the United States being an increase of 0.5 per cent. This brings the cost of living to within three-tenths of 1 per cent of what it was in December, 1922.

During the three months from March to June, 1923, the price of food increased in 28 of the 32 cities, clothing increased in 22 of the cities, and furniture increased in all of the cities. Housing increased in 17 and decreased in 12 cities, miscellaneous items increased in 11 and decreased in 15 cities, while fuel and light increased in 2 cities and decreased in 28 cities. In a few cities one or more of the groups of items remained the same in June as in March.

From June to September, 1923, there was an increase in every city, the range being from 0.2 per cent to 2.7 per cent. The average increase for the United States was 1.4 per cent. Food and clothing increased in every city, rents increased in 25 cities. The other groups of items increased in the majority of cities, but decreased in a few.

From September to December, 1923, the changes ranged from 1.3 per cent decrease to 1.4 per cent increase, the average for the United States being an increase of 0.6 per cent. There was an increase in all but 5 of the cities. In 23 cities there was an increase in the cost of food; in clothing there was an increase in 12 cities and a decrease in 13; in housing there was an increase in 27 cities; in fuel and light an increase in 24 cities; while in house-furnishing goods and miscellaneous items the increases and decreases were fairly divided among the cities.

From December, 1923, to March, 1924, there was a decrease in every city, ranging from 0.4 to 2.9 per cent, the average for the United States being 1.6 per cent. There was a decrease in the cost of food in every city. The cost of clothing was less in 22 cities, and of housefurnishings in 19 cities. Housing increased in 19 cities and decreased in 11 cities.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO MARCH, 1924

Baltimore, Md.

Per cent of increase from December, 1914, to—																				
Item of expenditure	Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924
Food.....	14.1	20.9	64.4	96.4	91.1	92.5	110.9	75.6	43.4	48.6	46.9	38.3	39.9	39.4	46.1	42.6	46.5	52.0	50.6	43.9
Clothing.....	2.7	24.0	52.1	107.7	128.9	177.4	191.3	159.5	123.2	101.5	88.6	82.0	78.9	77.8	80.5	81.6	81.4	82.9	81.8	81.6
Housing.....	1.2	9	3.0	13.8	16.8	25.8	41.6	49.5	63.0	64.0	64.7	65.2	65.4	65.6	66.9	67.6	69.6	70.4	71.9	71.7
Fuel and light.....	5	9.1	25.5	46.0	37.1	48.1	57.6	79.0	70.9	84.9	85.5	85.5	84.8	84.8	94.9	95.5	91.6	88.2	93.5	93.5
House-furnishing goods.....	5.6	26.4	60.8	122.3	134.6	167.0	191.8	181.9	147.5	128.7	123.7	115.0	113.3	114.2	116.6	125.0	127.5	129.5	130.2	132.7
Miscellaneous.....	11.4	18.5	51.3	78.7	82.8	99.4	111.4	112.9	111.8	112.2	108.6	106.9	104.4	103.8	102.6	103.2	103.8	104.0	105.2	105.6
Total.....	11.4	18.5	51.3	84.7	84.0	98.4	114.3	96.8	77.4	76.5	73.2	67.9	67.6	67.2	70.9	70.2	72.0	74.7	74.8	71.9

Boston, Mass.

Food.....	10.3	18.0	45.8	74.9	67.9	80.8	105.0	74.4	41.9	52.1	50.4	34.3	32.5	39.7	47.9	39.3
Clothing.....	0.6	21.9	47.6	117.3	137.9	192.4	211.1	192.7	150.3	118.8	106.3	98.9	96.7	93.0	93.4	92.0
Housing.....	1.1	10.5	29.2	56.6	55.0	63.2	83.6	25.8	29.8	31.6	33.8	33.9	34.4	40.2	44.3	48.1
Fuel and light.....	8.4	23.3	58.4	137.6	153.7	198.7	233.7	226.4	171.2	139.5	98.5	93.9	92.5	88.8	92.8	91.1
House-furnishing goods.....	1.6	15.7	38.1	62.0	64.8	81.1	91.8	96.6	96.2	94.6	93.0	91.6	89.5	150.5	148.7	147.0
Miscellaneous.....	1.6	15.7	38.1	70.6	72.8	92.3	110.7	97.4	74.4	72.8	70.2	61.2	59.6	89.2	80.2	90.3
Total.....	1.6	15.7	38.1	70.6	72.8	92.3	110.7	97.4	74.4	72.8	70.2	61.2	59.6	89.2	80.2	90.3

Buffalo, N. Y.

Food.....	2.4	30.1	64.1	87.8	82.9	94.7	115.7	78.5	37.7	49.9	50.8	39.4	38.5	41.6	50.9	42.3
Clothing.....	8.9	29.6	58.5	123.1	140.7	190.8	210.6	168.7	131.6	102.4	96.5	87.7	83.6	83.4	84.9	83.2
Housing.....	1.2	4.7	9.4	20.7	28.0	29.0	46.6	48.5	61.1	61.7	61.7	61.9	64.7	70.0	76.9	72.0
Fuel and light.....	1.3	9.3	23.5	49.3	51.9	55.7	69.8	74.9	73.9	79.5	79.7	78.8	78.8	119.1	116.7	122.2
House-furnishing goods.....	7.1	24.1	50.2	106.3	118.1	165.4	199.7	189.2	151.3	130.9	124.7	115.5	108.0	127.9	127.0	125.7
Miscellaneous.....	3.5	24.4	51.1	76.0	78.7	90.3	101.9	107.4	107.8	105.7	103.0	99.5	97.9	100.5	102.7	102.5
Total.....	3.5	24.4	51.1	80.9	84.2	102.7	121.5	101.7	80.3	78.4	76.8	69.9	68.6	74.1	78.2	75.1

Chicago, Ill.

Food.....	2.7	25.2	53.4	78.7	73.3	93.1	120.0	70.5	41.9	51.3	48.3	38.3	41.6	40.7	44.8	42.4	45.1	52.5	52.5	48.3
Clothing.....	7.5	24.2	50.6	138.9	157.1	224.0	205.3	158.6	122.7	86.0	74.3	66.8	63.0	65.8	67.5	71.2	72.2	76.0	76.0	74.9
Housing.....	1.1	7	1.4	2.6	8.0	14.0	35.1	48.9	78.2	79.8	83.9	84.1	87.4	87.6	88.9	89.1	92.1	92.4	93.4	93.8
Fuel and light.....	1.9	6.6	19.3	37.1	35.7	40.1	62.4	83.5	65.3	67.1	69.4	54.8	55.4	64.3	65.6	62.4	54.9	57.3	59.3	57.7
House-furnishing goods.....	3.9	20.0	47.5	108.9	126.9	176.0	213.9	205.8	162.4	138.0	133.7	114.5	108.5	107.5	120.4	127.2	133.1	133.9	132.9	131.7
Miscellaneous.....	3.0	19.5	41.8	58.7	61.7	84.3	87.5	96.5	98.5	97.5	94.5	92.7	87.9	87.3	86.7	87.3	87.7	88.1	88.1	88.1
Total.....	3.0	19.5	41.8	72.2	74.5	100.6	114.6	93.3	78.4	75.3	72.3	65.1	65.0	65.6	68.0	68.0	69.6	73.2	73.7	72.0

Cleveland, Ohio

Food.....	1.4	26.4	54.3	79.4	79.7	92.9	118.7	71.7	37.4	47.7	40.9	29.8	34.6	32.3	41.1	37.1	42.1	47.0	43.6	38.2
Clothing.....	2.0	18.0	43.7	102.6	125.2	171.2	185.1	156.0	124.0	90.8	83.8	77.4	72.4	69.5	70.9	77.1	77.6	79.6	76.6	79.1
Housing.....	.1	.9	11.3	16.5	21.8	39.9	47.3	80.9	88.1	82.8	81.2	72.0	69.6	70.1	74.0	73.8	73.8	74.7	78.7	70.1
Fuel and light.....	.3	10.0	26.8	51.9	47.9	62.9	90.3	94.3	89.6	91.9	103.8	102.2	102.2	113.5	116.3	118.0	151.6	150.8	147.0	145.3
House-furnishing goods.....	4.7	19.7	47.8	102.4	117.0	165.5	186.5	176.8	133.6	110.0	100.8	88.4	87.8	92.3	104.8	118.7	129.6	130.5	126.3	122.7
Miscellaneous.....	1.4	19.1	42.9	67.1	74.7	85.9	117.9	134.0	129.6	123.4	123.2	111.1	110.7	109.4	109.4	109.4	108.1	110.8	113.1	112.7
Total.....	1.4	19.1	42.9	71.4	77.2	98.2	120.3	107.3	87.5	82.4	78.8	68.5	68.9	68.1	72.9	73.3	77.1	79.9	79.6	77.3

Detroit, Mich.

Food.....	4.1	26.5	59.7	82.5	86.4	99.5	132.0	75.6	41.1	54.3	47.3	36.5	43.1	39.8	44.8	42.6	46.7	54.2	47.5	43.4
Clothing.....	2.3	18.9	46.7	113.8	125.2	181.8	208.8	176.1	134.1	99.9	92.5	82.7	81.4	81.2	79.9	83.1	84.0	84.2	85.8	84.7
Housing.....	2.1	17.5	32.6	39.0	45.2	60.2	68.8	108.1	101.4	96.6	91.1	88.0	86.9	87.6	92.1	92.3	96.9	99.1	107.5	107.3
Fuel and light.....	1.6	9.9	30.2	47.6	47.6	57.9	74.9	104.5	83.6	81.9	77.5	74.0	75.2	90.3	95.5	93.3	87.3	86.0	84.9	81.4
House-furnishing goods.....	8.7	24.5	50.4	107.3	129.3	172.6	206.7	184.0	134.0	102.9	96.8	82.6	76.0	80.0	81.1	100.5	105.7	104.9	105.3	106.7
Miscellaneous.....	3.5	22.3	49.9	72.6	80.3	100.1	141.3	144.0	140.1	131.9	130.7	126.3	121.3	122.2	121.5	123.5	124.2	128.2	128.4	127.7
Total.....	3.5	22.3	49.9	78.0	84.4	107.9	136.0	118.6	93.3	88.0	82.4	74.6	75.3	75.6	79.4	79.4	81.7	85.5	84.7	83.0

1 Decrease.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO MARCH, 1924—Continued

Houston, Tex.

Per cent of increase from December, 1914, to—																				
Item of expenditure																				
Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	
1 1.0	19.9	57.3	86.1	85.7	97.5	107.5	83.2	45.6	49.7	50.1	40.2	38.9	38.5	45.0	39.1	41.2	43.5	46.4	40.8	
2.7	25.0	51.5	117.3	134.8	192.0	211.3	187.0	143.4	111.5	104.9	98.8	98.4	97.8	98.2	100.4	100.4	102.6	102.6	102.0	
12.3	17.3	17.7	11.7	1.9	13.4	25.3	35.1	39.4	39.4	39.8	39.5	38.5	38.1	37.3	37.0	36.7	36.7	36.4	35.7	
1.9	8.3	22.7	47.5	37.6	60.0	55.1	74.2	46.0	39.0	39.4	34.4	32.9	35.7	39.2	33.6	36.5	40.2	55.8	56.4	
6.1	29.6	62.3	119.9	144.5	181.8	213.9	208.2	173.7	156.7	148.2	137.5	133.7	131.8	140.4	146.7	150.2	149.2	148.2	148.2	
1.3	16.4	44.9	67.6	72.3	88.2	90.4	103.9	100.8	100.0	99.0	96.0	94.0	93.0	93.0	92.8	91.5	91.9	93.2	90.1	
1.3	16.4	44.9	75.7	80.2	101.7	112.2	104.0	79.7	75.0	73.6	67.2	65.9	65.4	68.4	66.5	67.2	68.7	70.6	67.7	
Total.....																				

Jacksonville, Fla.

Food.....	10.3	17.6	50.8	76.2	74.2	80.9	90.1	65.6	32.6	43.1	40.6	30.0	30.6	28.9	34.8	31.0	32.0	35.1	38.9	33.5
Clothing.....	10.5	33.7	71.9	130.5	139.8	217.2	234.0	203.3	167.5	131.1	117.9	104.8	99.9	99.1	99.3	101.3	101.1	104.9	104.5	103.7
Housing.....	16.9	18.2	38.7	5.9	9.7	22.0	28.9	34.1	36.5	37.7	38.3	37.6	35.3	34.2	35.1	35.2	34.3	33.0	33.4	33.4
Fuel and light.....	(2)	2.3	15.1	55.2	49.2	61.1	72.6	92.6	80.7	68.1	68.9	61.6	58.9	58.9	65.7	65.9	63.6	62.1	75.1	75.1
House-furnishing goods.....	15.1	43.4	73.7	126.5	140.0	186.2	224.2	222.3	182.7	140.9	134.9	122.0	115.3	117.7	127.1	134.6	137.9	139.6	139.4	140.6
Miscellaneous.....	1.3	14.7	41.6	60.5	65.9	80.9	102.8	105.6	107.5	100.9	99.3	98.7	95.5	95.5	94.7	93.3	95.3	97.8	96.6	97.0
Total.....	1.3	14.7	41.6	71.5	77.5	101.5	116.5	106.2	85.8	78.7	75.1	68.0	65.7	65.0	67.8	67.4	67.7	69.9	71.9	69.7

Los Angeles, Calif.

Food	1 4.1	0.4	33.4	61.8	60.7	71.0	90.8	62.7	33.2	39.3	38.4	27.5	30.6	34.0	39.4	29.9	36.2	40.5	42.1	37.5
Clothing	2 2.8	14.3	45.0	109.1	123.3	167.6	184.5	166.6	127.4	98.3	94.3	84.4	81.3	78.2	78.0	83.2	82.5	83.6	83.0	83.2
Housing	1 2.7	1.2	5.1	1.6	8.7	26.8	42.6	71.4	85.3	86.0	90.1	96.0	95.6	94.4	94.8	97.1	97.7	99.3	100.9	103.7
Fuel and light	4 4.4	2.3	10.4	18.3	18.6	35.3	53.5	53.5	52.7	52.7	52.7	48.4	39.1	35.9	35.6	34.5	33.8	33.8	34.1	34.0
House-furnishing goods	6 3.3	23.1	56.4	118.5	134.2	175.5	202.2	202.2	156.6	148.4	143.2	133.7	128.8	128.1	138.1	148.6	153.6	152.3	152.0	147.0
Miscellaneous	1 1.9	7.7	28.9	52.0	59.1	76.9	86.6	100.6	96.8	98.8	99.6	104.0	103.8	102.2	101.2	101.4	100.8	101.0	104.2	103.0
Total	1 1.9	7.7	28.9	58.0	65.1	85.3	101.7	96.7	78.7	76.8	76.4	72.4	72.5	72.4	74.5	72.9	75.1	77.1	78.8	77.4

Mobile, Ala.

Food.....	1.0	19.9	57.3	80.6	83.6	98.4	110.5	73.5	39.1	43.7	42.4	32.3	33.2	32.9	39.1	36.2	37.7	41.3	44.7	38.2
Clothing.....	2.0	9.0	38.8	86.0	94.0	123.7	137.4	122.2	90.6	68.1	57.7	50.3	49.7	51.0	50.8	51.3	51.8	55.4	55.4	55.2
Housing.....	1.9	14.3	13.6	11.2	11.9	29.6	34.6	53.6	53.3	53.1	49.9	48.4	47.7	47.3	43.8	43.1	42.5	42.5	42.6	42.3
Fuel and light.....	(7)	8.8	27.1	57.1	66.6	75.6	86.3	122.3	102.1	97.2	98.2	86.1	84.4	90.9	96.4	95.6	93.3	91.0	98.1	98.1
House-furnishing goods.....	4.1	15.3	42.8	108.3	113.9	163.3	177.9	173.4	140.7	124.3	116.9	98.2	97.8	93.1	97.9	108.6	114.0	114.2	114.4	114.4
Miscellaneous.....	1.4	13.8	43.2	72.4	75.3	87.0	100.3	100.7	96.9	96.1	94.3	89.6	87.5	87.3	91.0	90.4	89.8	89.8	91.3	88.8
Total.....	1.4	13.8	43.2	71.4	76.6	94.5	107.0	93.3	70.8	67.2	63.6	55.8	55.3	55.5	58.8	58.0	58.6	60.5	62.6	59.5

New York, N. Y.

Food.....	1.3	16.3	55.3	82.6	75.3	91.0	105.3	73.5	42.5	50.3	51.8	36.5	40.0	38.8	49.5	43.0	44.4	48.2	52.0	41.2
Clothing.....	4.8	22.3	54.2	131.3	151.6	219.7	241.4	201.8	159.5	131.5	117.8	107.1	103.0	98.1	98.3	100.9	100.7	102.5	102.7	102.7
Housing.....	1.1	1.1	2.6	6.5	13.4	23.4	32.4	38.1	42.2	44.0	53.7	54.5	55.7	56.2	56.7	58.4	59.4	60.8	62.4	63.5
Fuel and light.....	1.1	11.0	19.9	45.5	45.4	50.6	60.1	87.5	95.9	92.4	90.7	89.4	89.0	97.7	95.7	93.2	89.1	94.6	94.2	93.2
House-furnishing goods.....	8.4	27.6	56.5	126.5	136.6	172.9	205.1	185.9	156.5	136.7	132.0	122.3	118.3	117.9	121.6	128.0	130.3	131.7	131.5	125.5
Miscellaneous.....	2.0	14.9	44.7	70.0	75.1	95.8	111.9	116.3	117.6	117.8	116.9	113.2	112.8	112.4	111.6	111.0	110.8	112.9	113.5	113.5
Total.....	2.0	14.9	44.7	77.3	79.2	103.8	119.2	101.4	81.7	79.7	79.3	69.9	70.7	69.7	74.2	72.2	72.6	75.4	77.3	72.7

Norfolk, Va.

Food.....	0.8	22.4	63.9	86.2	89.8	91.5	107.6	76.3	45.4	50.2	43.4	31.9	33.5	32.4	38.6	32.4	36.9	41.3	40.7	36.1
Clothing.....	.8	6.0	31.6	94.6	104.8	158.4	176.5	153.6	121.6	93.9	90.2	81.8	77.6	74.6	73.2	78.0	79.1	80.4	80.8	80.8
Housing.....	1.1	1.7	1.7	39.0	46.5	63.3	70.8	90.8	94.6	94.6	93.4	91.7	88.1	82.5	77.2	74.7	73.0	70.1	67.0	66.2
Fuel and light.....	(7)	17.0	33.3	74.6	69.7	89.9	110.6	128.9	97.3	98.1	91.6	93.5	87.7	97.8	106.5	114.8	102.1	100.3	96.9	101.0
House-furnishing goods.....	.6	8.7	39.0	105.5	110.7	143.6	165.0	160.5	129.0	110.5	106.1	95.0	88.4	86.7	89.1	96.3	101.0	104.4	103.8	105.0
Miscellaneous.....	.6	14.7	45.2	76.8	83.7	97.5	108.4	106.3	106.3	112.5	109.3	102.6	100.8	100.6	99.6	99.8	102.2	105.2	104.4	103.8
Total.....	.6	14.7	45.2	80.7	87.1	107.0	122.2	109.0	88.1	83.9	79.2	71.3	69.5	68.1	69.9	69.5	71.1	73.4	72.4	70.9

1Decrease.

2No change.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO MARCH, 1924—Concluded

Philadelphia, Pa.

Per cent of increase from December, 1914, to—

Item of expenditure	Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1919	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924
Food	0.3	18.9	54.4	80.7	75.5	87.2	101.7	68.1	37.8	44.6	43.9	34.4	38.1	32.7	43.4	38.3	42.7	46.3	45.1	38.2
Clothing	3.6	16.0	51.3	111.2	135.9	100.3	219.6	183.5	144.7	112.2	104.6	96.2	89.5	87.4	87.6	88.0	88.0	88.4	88.2	87.4
Housing	1.3	1.7	2.6	8.0	11.3	16.7	28.6	38.0	44.2	47.1	48.1	48.7	49.6	51.1	52.9	54.7	58.1	62.4	66.9	69.9
Fuel and light	1.8	5.4	21.5	47.9	43.3	51.3	66.8	96.0	85.6	89.3	92.0	89.7	85.7	86.3	93.0	94.4	89.9	93.0	102.2	98.0
House-furnishing goods	6.9	19.9	49.8	107.7	117.8	162.8	187.4	183.4	135.5	169.1	101.6	91.7	90.0	89.1	96.9	108.1	110.8	110.8	111.6	108.8
Miscellaneous	1.2	14.7	43.8	67.5	71.2	88.6	102.8	122.3	119.2	116.4	116.2	113.8	112.3	111.5	110.7	112.0	112.4	112.0	112.0	112.0
Total	1.2	14.7	43.8	73.9	76.2	96.5	113.5	100.7	79.8	76.0	74.3	68.2	68.2	65.5	70.7	69.8	72.1	74.2	74.7	71.9

Portland, Me.

Food	12.0	18.6	49.8	86.8	80.6	91.9	114.5	78.7	46.7	56.8	54.8	39.2	39.9	44.5	43.1	48.1	45.3	51.7	52.3	45.9
Clothing	2.1	9.7	32.8	85.8	103.8	148.5	165.9	147.8	116.3	96.6	88.1	81.0	76.7	74.8	74.8	76.2	77.3	77.8	76.7	76.5
Housing	2	6	2.4	2.5	5.7	10.7	14.5	20.0	23.1	23.3	26.6	27.0	24.8	26.3	30.7	31.1	27.3	27.4	31.7	31.6
Fuel and light	4	11.4	28.9	67.7	58.4	69.8	83.9	113.5	96.8	90.9	94.0	93.8	96.1	96.7	94.7	94.9	94.9	94.9	100.0	100.0
House-furnishing goods	6.2	20.9	43.5	110.8	126.4	163.7	190.3	191.2	152.2	139.1	123.6	110.6	108.1	106.4	114.2	122.6	129.7	130.4	130.2	127.9
Miscellaneous	1.4	13.8	38.0	65.6	72.1	83.2	89.4	94.3	94.1	94.1	91.2	89.5	88.2	88.0	88.0	88.0	88.0	87.6	89.3	88.7
Total	1.4	13.8	38.0	72.2	74.3	91.6	107.6	93.1	72.1	72.0	69.2	60.7	59.7	61.5	64.1	64.4	63.3	65.8	66.9	64.1

Portland, Oreg.

Food	13.8	9.8	42.2	70.6	67.1	81.6	107.1	60.9	26.0	35.9	33.1	24.6	26.5	30.1	34.3	26.5	29.5	34.1	35.1	28.6
Clothing	3.0	15.8	44.4	96.6	115.5	142.1	158.6	122.1	91.2	70.4	65.3	55.5	53.2	53.4	54.9	60.3	61.3	61.8	61.8	62.1
Housing	10.9	19.6	22.2	12.3	20.2	27.7	33.2	36.9	42.9	43.3	43.3	43.2	43.3	43.7	43.6	43.5	42.5	42.6	42.7	43.4
Fuel and light	1.0	3.4	20.2	30.9	31.3	42.3	46.9	65.9	67.1	58.9	59.4	56.2	50.3	59.0	65.7	70.2	61.3	62.1	67.1	65.3
House-furnishing goods	2.9	18.0	54.5	103.0	122.1	145.1	183.9	179.9	148.0	126.9	121.9	104.6	101.9	100.3	102.9	109.4	109.8	109.6	109.0	106.3
Miscellaneous	13.1	6.1	31.2	57.9	62.3	71.6	79.7	81.1	81.1	80.9	80.0	78.9	78.5	80.5	79.4	78.1	75.8	76.3	79.6	78.7
Total	13.1	6.1	31.2	64.2	69.2	83.7	100.4	80.3	62.2	60.5	58.3	52.3	52.1	54.2	56.1	54.6	54.6	56.4	57.8	55.3

San Francisco, and Oakland, Calif.

Total	13.1	6.1	31.2	64.2	69.2	83.7	100.4	80.3	62.2	60.5	58.3	52.3	52.1	54.2	56.1	54.6	56.4	57.8	55.3
Food	14.3	9.6	35.9	66.2	63.3	74.2	93.9	64.9	33.3	40.6	40.4	29.6	31.1	34.6	38.8	29.0	40.5	42.3	35.3
Clothing	2.5	14.5	43.6	109.0	134.6	170.4	191.0	175.9	140.9	110.1	106.3	97.8	90.7	86.1	85.4	90.0	92.1	94.4	94.4
Housing	1.7	12.5	14.0	13.9	13.5	4.7	9.4	13.0	21.7	23.6	25.8	27.7	29.4	30.3	30.0	31.7	33.4	36.0	37.0
Fuel and light	1.1	4.6	14.4	30.1	28.9	41.3	47.2	66.3	63.3	65.3	65.3	65.3	59.5	52.0	52.5	48.4	46.2	48.8	53.6
House-furnishing goods	6.0	21.7	48.2	103.4	116.6	143.8	180.1	175.6	143.9	121.7	113.9	105.6	104.4	103.8	105.4	116.5	117.1	116.9	115.8
Miscellaneous	11.7	8.3	28.6	50.5	61.0	74.7	79.0	84.8	84.4	87.4	86.8	84.4	83.7	83.5	84.2	84.8	79.4	81.2	72.7
Total	11.7	8.3	28.6	57.8	65.6	87.8	96.0	85.1	66.7	64.6	63.6	57.5	56.8	57.1	58.8	56.5	60.4	62.1	58.0

Savannah Ga.

Food	10.3	17.6	50.8	76.2	74.2	80.9	91.7	93.5	28.7	30.8	33.7	16.7	22.7	13.4	20.8	17.4	17.7	18.4	13.1
Clothing	8	24.1	56.6	133.0	146.3	195.9	212.1	171.5	133.2	101.3	84.2	74.1	71.7	77.4	76.2	81.7	82.4	80.9	81.1
Housing	1.4	13.0	14.3	5.9	10.2	22.0	33.5	58.6	61.9	60.6	60.9	58.8	57.8	56.5	52.7	51.5	49.5	47.5	40.5
Fuel and light	1.3	11.7	12.1	37.5	35.5	52.2	65.3	94.4	74.2	60.4	66.1	65.3	55.2	60.6	68.3	67.8	62.2	64.1	63.6
House-furnishing goods	1.8	12.8	50.7	128.6	136.5	182.1	207.2	206.6	175.9	159.2	133.7	129.0	120.1	121.6	123.8	133.6	135.9	133.4	132.2
Miscellaneous	1.2	14.5	42.5	67.3	71.2	82.0	83.8	91.5	93.0	88.0	87.4	84.6	81.1	80.9	79.5	78.8	77.2	76.7	77.9
Total	1.2	14.6	42.5	75.0	79.8	98.7	109.4	98.7	77.6	71.3	66.2	56.9	56.8	55.0	56.8	57.0	55.6	55.9	54.1

Seattle, Wash.

Food	12.8	8.5	38.7	72.5	69.3	80.9	102.3	54.1	27.1	34.9	30.5	27.1	30.0	31.6	33.9	28.1	36.1	35.8	32.7
Clothing	1.2	11.3	36.4	88.0	110.2	154.5	173.9	160.5	128.7	93.5	88.7	79.8	78.0	73.9	74.2	75.6	76.7	77.6	77.4
Housing	1.2	15.4	1.6	44.3	51.5	71.5	74.8	70.7	74.8	71.3	69.2	67.0	64.7	63.4	63.1	62.8	62.3	62.9	65.2
Fuel and light	1.2	2.9	23.9	51.8	51.8	63.8	65.8	78.7	78.7	77.3	69.0	67.5	64.0	62.7	59.6	60.9	58.2	59.1	57.7
House-furnishing goods	8.5	27.4	52.3	141.5	154.4	201.0	221.2	216.4	177.2	161.7	149.9	142.4	137.3	134.7	136.1	140.3	141.4	144.2	147.6
Miscellaneous	11.0	7.4	31.1	58.5	71.4	86.8	90.4	95.5	105.5	105.5	102.6	99.2	97.6	97.4	95.4	82.5	95.6	96.6	92.5
Total	11.0	7.4	31.1	69.9	76.9	97.7	110.5	94.1	80.2	75.5	71.5	67.4	67.0	66.5	66.7	61.9	68.4	68.5	66.3

Washington, D. C.

Food	0.6	15.7	61.1	90.9	84.6	93.3	108.4	79.0	47.4	59.1	51.1	40.8	44.3	42.5	49.2	43.0	48.8	52.7	43.5
Clothing	3.7	23.2	60.1	112.6	109.5	165.9	184.0	151.1	115.9	89.8	87.1	79.8	77.5	75.5	74.8	77.8	78.9	80.3	81.4
Housing	1.5	13.7	13.4	11.5	11.4	5.4	13.9	24.7	28.8	29.1	30.4	31.3	31.4	32.1	32.0	33.0	33.9	34.0	34.8
Fuel and light	(2)	7.3	24.9	40.9	41.8	42.8	53.7	68.0	57.1	57.6	49.9	47.1	44.5	49.0	55.1	53.2	51.2	49.4	46.4
House-furnishing goods	6.3	30.5	72.1	127.4	126.0	159.3	193.4	194.0	149.0	132.1	122.4	110.4	108.1	109.3	112.6	123.4	129.0	130.4	129.5
Miscellaneous	4	15.3	44.3	55.9	57.4	62.7	68.2	73.9	72.0	70.5	75.8	73.7	73.7	73.7	72.0	72.2	72.5	73.2	75.2
Total	1.0	14.6	47.3	73.8	71.2	87.6	101.3	87.8	67.1	66.2	63.0	56.8	57.6	56.9	59.5	58.2	60.9	62.9	59.9

1 Decrease.

2 No change.

3 Figures in this column are for April, 1919.

4 Figures in this column are for November, 1919.

Table 3 shows the changes in the cost of living from December, 1917, to March, 1924, for 13 cities. The table is constructed in the same manner as the preceding one and differs from it only in the base period and in the length of time covered.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO MARCH, 1924

Atlanta, Ga.

Per cent of increase from December, 1917, to—

Item of expenditure	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924
Food.....	19.0	18.0	27.9	34.0	12.8	18.9	15.8	17.2	11.9	10.5	12.3	18.9	11.8	10.3	16.9	16.3	11.2
Clothing.....	29.1	40.7	66.9	80.5	56.5	35.2	13.6	8.3	1.9	4	3.1	2.8	5.4	5.9	6.7	6.9	6.9
Housing.....	14.0	14.5	32.6	40.4	73.1	78.8	77.0	75.4	72.2	68.1	63.2	62.7	61.9	61.4	62.5	62.2	60.9
Fuel and light.....	17.0	17.9	30.8	61.0	66.8	56.1	46.6	43.7	34.8	39.1	58.7	57.6	56.5	42.7	42.4	39.3	38.2
House-furnishing goods.....	24.9	30.1	49.9	65.0	58.4	38.0	25.3	23.0	16.1	15.2	13.9	17.4	21.6	23.9	23.7	23.5	22.0
Miscellaneous.....	14.8	21.5	31.7	34.6	39.7	40.5	39.4	39.7	36.1	34.5	34.2	34.1	34.1	32.8	33.6	33.3	33.8
Total.....	19.7	23.3	37.9	46.7	38.5	25.2	20.7	18.7	13.8	13.7	13.9	15.1	14.6	14.2	15.9	16.0	13.8

Birmingham, Ala.

Food.....	17.7	18.3	26.5	36.4	11.9	19.1	16.2	18.5	14.0	13.1	14.5	19.9	12.5	19.9	18.3	16.6	11.1
Clothing.....	23.9	39.8	57.6	66.4	45.1	24.8	6.7	1.4	15.2	16.1	11.2	11.7	1.5	1.8	3.7	3.8	4.0
Housing.....	8.1	12.8	34.9	40.3	68.5	77.4	76.5	70.9	67.5	67.0	66.0	62.3	62.6	63.1	64.6	67.9	68.4
Fuel and light.....	22.8	31.9	39.8	55.3	74.2	54.3	53.1	44.1	29.8	25.0	40.0	49.9	49.8	40.7	46.0	50.2	50.8
House-furnishing goods.....	19.4	20.2	45.1	55.6	48.1	32.0	15.0	12.0	3.0	3.3	5.4	8.9	14.9	17.8	18.6	19.7	17.7
Miscellaneous.....	13.8	16.3	26.8	28.7	30.4	33.8	35.9	35.5	31.8	30.4	29.6	29.6	29.3	28.5	25.7	27.2	27.2
Total.....	17.0	19.8	34.3	41.9	33.3	22.1	19.6	16.2	11.0	10.7	11.4	31.2	12.9	13.6	14.4	16.0	14.3

Cincinnati, Ohio

Food.....	15.3	18.1	22.9	38.7	10.3	17.4	12.2	18.3	12.4	18.9	12.7	10.4	11.9	19.3	17.1	16.7	19.4
Clothing.....	33.8	48.3	84.2	96.7	73.5	49.0	22.6	13.9	6.7	4.9	5.5	5.5	8.7	8.8	9.2	9.2	7.8
Housing.....	2.2	5.8	12.8	25.0	25.0	27.6	28.2	28.5	30.3	31.0	33.6	33.2	38.3	40.7	42.2	45.6	48.7
Fuel and light.....	10.0	15.6	12.0	26.9	34.1	15.7	15.6	42.4	35.6	35.2	58.2	61.0	58.6	51.9	51.6	53.0	49.3
House-furnishing goods.....	25.7	30.5	51.1	75.5	66.7	39.7	25.2	22.3	16.7	15.8	15.7	17.2	21.3	24.3	25.8	26.2	26.5
Miscellaneous.....	20.4	21.8	40.3	47.6	53.4	52.3	48.2	47.3	44.4	44.0	43.6	42.7	43.1	42.8	43.4	43.3	46.3
Total.....	17.3	21.1	35.2	47.1	34.7	21.7	18.3	15.3	11.8	12.7	12.5	13.8	14.2	15.5	16.8	17.7	17.2

Denver, Colo.

Total.....	17.3	21.1	35.2	47.1	34.7	21.7	18.3	15.3	11.8	12.7	12.5	13.8	14.2	15.5	16.8	17.7	17.2
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Denver, Colo.

Food.....	20.0	20.7	26.0	41.5	7.9	13.1	17.8	18.8	117.6	114.2	117.2	19.0	114.6	111.5	110.4	18.7	113.9
Clothing.....	40.1	53.2	82.1	96.8	78.3	53.9	33.7	27.7	18.3	13.3	13.9	16.6	16.9	16.9	17.5	17.9	17.2
Housing.....	12.8	21.8	33.5	31.9	69.8	76.9	80.1	82.6	84.4	84.8	85.0	86.9	87.1	85.4	86.7	88.9	87.6
Fuel and light.....	8.1	8.4	19.6	22.3	47.1	37.5	40.0	39.7	33.1	32.8	41.4	40.7	38.0	30.4	37.6	37.2	16.3
House-furnishing goods.....	22.6	31.3	46.3	60.2	58.9	42.5	32.5	27.9	21.1	20.4	20.0	21.2	24.7	26.1	26.7	27.0	26.2
Miscellaneous.....	14.8	17.7	32.3	35.4	38.8	42.8	44.1	43.1	40.2	38.1	37.7	37.6	37.9	37.1	37.5	36.8	36.5
Total.....	20.7	25.3	38.2	50.3	38.7	26.9	26.1	24.5	18.5	18.8	18.1	21.6	19.7	19.9	21.2	22.1	18.5

Indianapolis, Ind.

Food.....	17.8	16.4	28.2	49.0	11.0	10.1	12.1	18.4	113.4	19.9	113.2	111.1	110.3	18.0	14.2	16.5	19.8
Clothing.....	32.4	40.1	73.8	87.9	72.3	45.8	21.5	16.2	10.9	7.9	8.3	8.6	11.5	11.6	13.1	13.4	13.1
Housing.....	1.6	2.6	11.6	18.9	32.9	37.4	41.4	42.5	42.2	41.3	41.7	44.1	44.5	44.6	43.9	47.1	42.2
Fuel and light.....	19.8	16.7	27.3	45.6	60.3	49.4	47.5	43.8	34.8	44.9	71.3	73.4	69.1	54.9	54.3	41.5	42.6
House-furnishing goods.....	18.9	24.8	48.4	67.5	63.0	35.3	25.0	22.5	13.9	13.7	14.2	16.7	21.5	23.2	23.6	24.0	24.4
Miscellaneous.....	21.9	26.8	38.2	40.5	47.5	47.4	46.5	46.2	45.8	45.4	46.0	46.7	47.1	46.1	49.9	49.2	48.5
Total.....	19.1	21.1	36.5	50.2	37.6	23.9	22.6	19.3	15.3	16.4	17.1	18.8	19.7	19.4	22.2	20.6	19.4

Kansas City, Mo.

Food.....	17.3	15.1	24.5	44.9	10.2	18.3	14.3	16.6	115.7	113.5	116.1	112.0	112.9	112.5	112.1	110.2	112.2
Clothing.....	40.7	44.7	89.9	104.5	76.3	52.3	27.9	24.1	17.4	15.9	14.7	14.6	14.5	14.5	15.3	15.2	14.6
Housing.....	5.4	6.7	26.0	29.4	63.9	65.0	66.2	69.7	64.8	59.4	57.8	61.4	61.1	53.7	53.9	56.8	55.1
Fuel and light.....	18.0	9.6	27.5	35.2	55.1	43.3	43.7	42.6	36.0	36.3	47.1	40.2	38.6	36.1	35.1	36.7	35.9
House-furnishing goods.....	31.1	37.9	61.8	73.0	68.7	50.0	32.8	26.2	15.2	11.6	10.3	12.1	21.2	22.5	23.0	22.6	21.5
Miscellaneous.....	15.6	20.8	31.5	37.1	40.3	40.4	38.2	37.6	33.1	32.3	32.4	33.3	33.4	33.8	34.6	36.2	35.4
Total.....	19.6	20.6	38.2	51.0	39.5	27.3	23.9	22.5	15.3	15.0	14.2	16.2	16.0	15.3	15.5	17.2	15.8

Memphis, Tenn.

Food.....	20.3	22.7	28.4	38.8	7.0	14.2	19.2	11.2	16.1	15.1	17.7	14.9	15.3	113.9	111.7	111.2	14.1
Clothing.....	27.7	38.3	66.2	77.5	59.0	36.1	20.2	15.3	9.3	7.3	7.0	6.7	9.5	9.8	10.9	11.0	10.0
Housing.....	(3)	8.2	23.1	35.9	66.2	79.7	77.7	77.3	75.5	74.8	73.9	72.5	72.3	72.3	72.0	72.5	72.2
Fuel and light.....	26.8	23.4	34.1	49.7	105.4	64.5	66.1	67.1	61.8	56.3	70.4	69.2	70.5	62.8	62.1	65.0	66.2
House-furnishing goods.....	25.4	30.7	53.2	67.1	53.9	29.9	19.2	14.7	8.9	6.8	7.8	12.2	20.3	23.2	22.1	23.4	22.3
Miscellaneous.....	16.1	20.9	28.3	38.8	43.2	42.9	42.2	42.3	39.9	37.8	37.8	37.4	38.2	38.1	37.3	37.3	36.6
Total.....	18.3	23.3	35.2	46.4	39.3	26.7	25.1	23.2	19.2	18.2	17.9	18.6	19.6	19.9	20.6	21.0	19.5

1 Decrease.

2 No change.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO MARCH, 1924—Concluded
Minneapolis, Minn.

Item of expenditure	Per cent of increase from December, 1917, to—																
	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924
Food.....	17.7	21.4	34.1	50.0	13.0	17.9	13.5	14.9	110.0	16.0	19.9	15.3	17.6	16.4	15.0	14.7	16.7
Clothing.....	33.5	40.1	67.0	76.7	63.6	41.0	18.4	14.3	9.7	7.9	6.0	6.5	8.7	9.2	9.4	9.3	9.4
Housing.....	1.1	12.0	8.0	10.7	36.8	39.0	44.0	46.7	46.7	44.6	46.2	46.8	46.8	42.5	43.4	47.4	47.4
Fuel and light.....	14.7	13.4	22.4	36.9	60.3	52.8	50.5	50.2	43.7	43.7	44.8	47.0	48.0	44.9	43.0	45.6	44.4
House-furnishing goods.....	18.1	23.6	45.6	63.5	65.8	43.3	30.5	27.9	21.9	21.4	21.3	22.5	26.7	29.7	27.8	28.2	26.5
Miscellaneous.....	12.3	15.9	25.4	31.3	37.6	37.9	37.3	37.4	34.5	32.6	32.5	32.6	32.5	32.8	32.3	32.0	31.7
Total.....	15.8	18.8	32.7	43.4	35.7	23.7	21.6	20.7	17.0	17.3	15.9	18.0	17.8	17.4	17.8	18.8	17.9
New Orleans, La.																	
Food.....	16.6	17.4	21.1	28.6	10.7	10.7	16.4	19.3	12.0	12.8	13.7	10.5	12.5	13.2	19.9	18.7	111.0
Clothing.....	36.8	48.8	83.2	94.9	69.4	45.0	29.2	24.9	18.9	15.6	15.4	16.2	16.4	17.8	19.0	19.5	19.1
Housing.....	(2)	1	10.8	12.9	39.7	46.7	49.5	57.9	58.2	58.5	58.7	54.7	54.7	55.5	55.8	57.4	57.9
Fuel and light.....	19.7	20.8	24.7	36.3	41.5	29.2	36.2	40.4	31.8	33.4	30.7	38.5	35.2	32.9	34.4	37.1	34.5
House-furnishing goods.....	23.8	30.0	57.7	75.9	63.9	47.7	30.7	28.5	20.8	17.9	17.7	26.2	29.9	34.8	33.7	33.6	32.0
Miscellaneous.....	15.9	17.5	35.1	42.8	57.1	58.2	61.0	60.2	59.1	58.6	55.6	51.9	50.1	50.1	50.3	50.3	49.4
Total.....	17.9	20.7	33.9	41.9	36.7	23.8	23.8	22.7	19.9	18.9	17.8	18.6	17.6	17.7	19.4	20.2	18.8
Pittsburgh, Pa.																	
Food.....	18.8	16.2	25.1	36.5	14.3	18.8	13.0	15.6	14.4	12.2	11.7	15.4	18.1	15.4	14.2	12.1	17.9
Clothing.....	35.9	45.3	82.8	91.3	75.4	50.7	27.2	23.6	19.3	17.3	14.0	13.1	13.9	14.8	15.9	14.9	14.0
Housing.....	7.6	13.5	15.5	34.9	35.0	55.5	55.5	55.3	55.3	56.7	56.7	56.7	56.9	60.4	60.7	60.7	61.0
Fuel and light.....	9.2	9.4	9.8	31.7	64.4	59.8	55.6	66.2	66.0	60.0	73.0	72.8	73.1	68.4	69.1	76.9	76.0
House-furnishing goods.....	26.3	34.1	63.1	77.4	78.1	58.2	36.2	31.6	23.7	20.1	22.0	25.1	27.0	29.4	29.4	29.0	30.8
Miscellaneous.....	16.3	16.7	28.3	41.2	46.3	48.6	47.6	48.0	44.4	43.4	42.8	42.8	44.1	44.1	45.7	43.1	45.7
Total.....	19.8	21.8	36.2	49.1	39.3	27.7	24.4	22.8	17.4	17.8	17.6	20.1	19.6	21.3	22.3	22.9	20.8

Richmond, Va.

Food.....	20.5	20.6	23.1	36.1	11.9	17.4	11.0	12.9	17.8	110.8	16.3	19.0	17.2	15.1	14.8	18.9
Clothing.....	33.8	42.3	78.6	93.6	69.0	43.8	24.2	21.2	12.9	10.6	10.6	11.8	12.5	13.4	12.9	12.7
Housing.....	1.0	3.6	9.8	12.5	25.9	29.4	33.0	34.1	34.2	35.4	35.3	35.7	35.7	39.1	39.4	39.5
Fuel and light.....	11.8	11.4	18.7	36.1	62.2	47.1	46.7	46.8	33.4	44.5	54.2	59.9	52.7	54.7	61.2	60.7
House-furnishing goods.....	26.3	28.6	55.9	75.4	70.0	48.8	36.0	33.0	27.6	27.5	29.4	34.7	40.0	40.4	40.5	40.8
Miscellaneous.....	9.0	13.5	24.0	32.4	36.0	38.7	38.4	38.4	34.7	34.6	33.5	33.9	33.9	34.7	35.4	35.8
Total.....	17.9	20.6	32.0	43.8	33.3	20.2	19.5	18.3	13.2	12.1	14.4	14.3	14.9	16.6	17.1	15.5

St. Louis, Mo.

Food.....	18.0	16.1	26.2	46.2	8.8	10.1	14.5	11.6	12.1	113.8	19.5	12.7	11.5	18.6	17.5	110.6
Clothing.....	32.4	39.3	78.1	89.7	70.0	43.8	21.2	17.2	7.9	6.2	6.3	9.0	9.0	9.5	9.6	9.5
Housing.....	2.7	3.8	16.8	29.8	42.4	52.5	61.2	63.8	65.7	67.0	68.0	70.2	74.6	77.4	79.5	80.9
Fuel and light.....	4.8	3.7	8.2	19.6	42.6	30.9	29.5	33.4	32.3	44.3	48.9	47.5	30.8	31.7	32.1	31.3
House-furnishing goods.....	21.8	32.5	52.9	73.1	70.2	43.5	25.1	19.2	12.8	12.3	14.9	27.5	29.8	31.0	30.5	30.6
Miscellaneous.....	14.5	15.7	30.3	37.6	43.2	42.1	42.0	40.6	33.2	33.1	33.4	33.5	33.4	35.8	35.8	35.8
Total.....	16.7	17.9	34.2	48.9	35.4	23.1	22.0	18.5	15.1	15.0	17.0	17.3	17.7	19.9	20.6	19.4

Scranton, Pa.

Food.....	21.3	18.1	26.9	41.4	17.8	14.0	2.8	4.1	16.8	16.7	19.0	12.1	15.5	11.3	0.2	16.7
Clothing.....	34.4	49.6	82.1	97.7	76.5	54.3	31.3	29.1	25.2	24.2	21.1	20.7	21.5	23.3	23.2	23.1
Housing.....	5.5	6.2	2.4	17.2	18.5	41.5	42.2	44.6	46.6	52.8	53.1	53.6	53.6	59.5	60.8	61.0
Fuel and light.....	24.7	25.7	31.5	43.5	67.3	62.8	64.8	67.1	65.8	68.0	69.3	68.6	65.2	65.4	75.3	73.9
House-furnishing goods.....	27.0	35.6	48.9	62.8	62.0	48.6	34.6	30.7	25.7	24.2	25.4	28.5	31.8	34.4	34.9	35.4
Miscellaneous.....	21.4	24.9	34.7	47.9	50.4	54.6	53.8	52.4	50.1	49.9	49.3	49.3	51.4	51.4	51.7	52.8
Total.....	21.9	25.0	37.1	51.5	39.1	28.2	26.3	26.3	20.4	20.9	19.4	22.4	21.6	24.4	25.8	22.9

1 Decrease.

2 No change.

Prices of Building Materials in Denmark in 1923 ¹

EVERY year the Statistical Department of Denmark makes an investigation into the cost of buildings for a small farm (*husmandsbrug*),² which in 1914 was 6,000 kroner. The information is secured from seven master builders in various parts of the country.

The latest investigation, based on prices in December, 1923, shows the building cost to be about 14,000 kroner. In 1919 the cost was 18,700 kroner; in 1920, 21,900 kroner; in 1921, 15,400 kroner; and in 1922, 13,500 kroner, the year 1923 showing an increase of about 500 kroner over 1922.

The increase from 1922 to 1923 was due mainly to the increase in the price of lumber, which in 1923 was about 3,300 kroner as against 2,900 kroner in 1922, an increase of about 14 per cent. For the other items the increases were not important.

The total cost for 1923 was 13,941 kroner, of which 2,066 kroner was for wages of masons and foundation workers, 3,945 kroner for masonry supplies, 434 kroner for wages of roofers, 1,023 kroner for roofing materials, 959 kroner for wages of carpenters, 3,272 kroner for lumber supplies, 1,438 kroner for wages of joiners, tin-smiths, and painters, and 804 kroner for a well, ironware, etc. Prices of building materials in December, 1923, were approximately two and one-half times the pre-war prices.

Prices of building supplies (hauling included in most cases) are shown for the years 1914, 1922, and 1923 in the following table:

PRICES OF BUILDING MATERIALS IN DENMARK IN 1914, 1922, AND 1923

[Krone at par=26.8 cents; exchange rate varies. 1 ell=24.7 inches]

Article	Unit	1914	1922	1923
		<i>Kroner</i>	<i>Kroner</i>	<i>Kroner</i>
Bricks.....	1,000.....	22.00	57.00	58.00
Cement.....	Barrel.....	5.30	15.00	14.30
Lime.....	do.....	4.80	10.35	10.50
Tile.....	1,000.....	72.75	167.50	172.50
Stove.....	Each.....	58.00	118.00	118.00
Rafters (3 by 6 inches).....	Ell.....	.28	.57	.66
Laths.....	do.....	.07	.14	.17
Ceiling.....	Square ell.....	.74	1.57	1.80
Flooring.....	do.....	.94	1.88	2.25
Inside paneled door.....	Each.....	23.00	48.00	47.00

¹Denmark. Statistiske Departement. Statistiske Efterretninger, Dec. 21, 1923, pp. 206, 207.²To be used for determining loans under law of Oct. 4, 1919.

WAGES AND HOURS OF LABOR

Wages and Hours of Labor in the Slaughtering and Meat-Packing Industry, 1923

THIS article presents average wage rates, earnings, and hours of labor in the slaughtering and meat-packing industry. Figures are given by occupation for 5 of the most important departments and for all employees, all occupations combined, in each of 13 departments. The figures for 1923 are drawn from a recent survey made in the industry; those for 1917 and 1921, shown in comparison, are taken from preceding publications of the Bureau of Labor Statistics on this subject. The 1923 figures will be published in detail in a forthcoming bulletin of the bureau. The figures are prepared from data taken from the pay rolls of representative establishments each year. The 13 departments for which data are shown are cattle-killing, hog-killing, sheep and calf killing, offal, hide, casing, cutting or fresh-beef, cutting or fresh-pork, lard and oleo-oil, sausage, cured-meat, canning, and maintenance and repair departments. Data were not taken for officials; clerks; salesmen; power-house employees; foremen; employees of box factories; brush, cooper, tin, or other shops in which products are entirely new; repair work; nor for employees of butterine, mincemeat, produce, extract, soap, curled hair, wool, bone and fertilizer departments.

According to the census this is the largest manufacturing industry of the country as measured by value of product, the value of the product for 1919 being \$4,246,290,614.

The 1917 data are for 55,089 males in 66 establishments and 6,582 females in 51 establishments for a pay period of varying dates in the first half of the year, and thus represent the period at the entrance of the United States into the World War.

The 1921 data are for 30,075 males in 34 establishments and 3,334 females in 31 establishments for a pay period in April. Those for 1923 are for 45,082 males in 38 establishments and 6,112 females in 37 establishments. The data from 35 establishments are for a pay period in November and those from 3 for a pay period in December.

The data are taken from representative plants of all the large packing companies and from a certain number of smaller companies. These plants are located in the most important meat-packing centers. The total number of wage earners covered in 1923 is approximately 32 per cent of the total number in the industry as shown by the Census of Manufactures, 1919, and 50 per cent of the total number in the industry in the principal slaughtering and meat-packing States.

The average rate of wages per hour in each year for all males in all occupations and departments combined is \$0.271 for 1917, \$0.504 for 1921, and \$0.487 for 1923, and for all females is \$0.179 for 1917, \$0.362 for 1921, and \$0.356 for 1923.

Between April, 1921, and the winter of 1923 there was a general reduction of wages followed later by an increase. Practically all

plants that were covered in 1923 reduced the wages of employees who were paid hourly rates and piece rates. Those paid weekly rates were not reduced. The reduction varied in amount. A few made a straight reduction of 5, 10, or 13 per cent, while approximately 20 plants employing a very great majority of the employees covered in this study reduced skilled labor 3 cents per hour, semiskilled 5 cents per hour, unskilled labor $7\frac{1}{2}$ cents per hour, and piece rates 8 per cent. These reductions were followed by increases. Establishments that made percentage reductions made increases restoring the April, 1921, rates, while the establishments that cut hourly rates made an increase of 3 cents per hour in the rates of skilled labor, 4 cents per hour of semiskilled, and an increase of 5 cents per hour in the rates of unskilled labor. The result is a reduction in 1923 as compared with 1921 in the industry as a whole. The averages for the 13 departments at the end of the table show an average wage-rate reduction in each department. A study of the occupation figures in the 5 departments included in the table shows that the reduction took place in nearly every occupation.

The average basic or regular full-time hours per week were increased between April, 1921, and the period covered by the 1923 study, the average for all males in all departments being 48.2 in 1921 and 52.3 in 1923; for females 48.3 in 1921 and 52.8 in 1923, and for all males and females 48.4 in 1921 and 52.3 in 1923. The increase is due to an increase from an 8-hour day or 48-hour week to a 9-hour day or a 54-hour week in a great majority of the plants covered in each of these years.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
CATTLE-KILLING DEPARTMENT											
Males											
Drivers and penners.....	1917	24	67	\$0.252	100	\$0.253			56.7		\$14.33
	1921	16	30	.464	184	.484	5.8	48.3	46.0	\$22.41	22.24
	1923	30	87	.447	177	.458	5.7	53.0	50.7	23.69	23.22
Knockers.....	1917	40	58	.292	100	.294			50.1		14.70
	1921	27	33	.517	177	.539	¹ 5.7	48.0	¹ 43.8	24.82	23.59
	1923	29	48	.504	173	.525	5.5	52.4	48.5	26.41	25.47
Shacklers or slingers.....	1917	30	48	.262	100	.276			47.8		13.20
	1921	24	34	.482	184	.502	5.4	47.9	40.6	23.09	20.41
	1923	26	71	.490	187	.495	5.2	52.5	43.5	25.73	21.51
Head holders.....	1917	2	2	.334	100	.576			34.5		19.89
	1921	2	2	.645	193	1.031	4.0	48.0	30.0	30.96	30.93
	1923	3	3	.747	224	.919	5.3	50.0	39.2	37.35	35.99
Stickers.....	1917	22	27	.360	100	.361			49.9		18.04
	1921	15	20	.584	162	.605	5.3	48.6	41.1	28.38	24.83
	1923	17	28	.629	175	.634	5.8	53.3	50.0	33.53	31.74
Headers.....	1917	46	90	.369	100	.384			51.3		19.71
	1921	23	53	.610	165	.645	¹ 5.5	47.6	¹ 46.9	29.04	¹ 26.36
	1923	28	79	.615	167	.627	5.7	52.1	45.7	32.04	28.65
Droppers and pritchers-up	1917	35	62	.254	100	.266			49.3		13.12
	1921	27	47	.489	193	.528	¹ 5.3	48.2	¹ 39.6	23.57	¹ 20.93
	1923	27	57	.472	186	.482	5.7	52.2	49.0	24.64	23.64

¹ Not including data for 1 establishment in which employees were paid biweekly.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
CATTLE-KILLING DEPARTMENT—continued											
Males—Continued											
Foot skimmers.....	1917	29	80	\$0.277	100	\$0.281			49.5		\$13.89
	1921	23	48	.485	175	.484	¹ 5.5	47.8	¹ 40.5	\$23.18	¹ 19.61
	1923	28	92	.492	178	.498	5.7	52.4	45.7	25.78	22.74
Leg breakers.....	1917	45	141	.306	100	.318			50.2		15.95
	1921	30	89	.530	173	.574	¹ 5.2	47.8	¹ 38.9	25.33	¹ 22.33
	1923	30	117	.532	174	.529	5.6	52.8	43.8	28.09	23.20
Rippers-open.....	1917	3	4	.315	100	.343			44.9		15.41
	1921	3	4	.533	169	.530	6.0	47.0	41.8	25.05	22.15
	1923	10	22	.510	162	.519	5.9	52.3	49.8	26.67	25.85
Gullet raisers.....	1917	5	7	.249	100	.246			51.1		12.57
	1921	14	18	.469	188	.474	5.4	48.2	41.6	22.61	19.71
	1923	10	20	.469	188	.469	5.3	53.1	43.1	24.90	20.17
Caul pullers.....	1917	33	50	.308	100	.318			50.1		12.96
	1921	22	29	.515	167	.545	5.3	47.9	38.7	24.67	21.08
	1923	25	49	.514	167	.523	5.9	52.5	47.8	26.99	25.62
Floormen or siders.....	1917	52	200	.572	100	.563			49.1		27.63
	1921	30	122	.859	150	.848	¹ 5.6	48.0	¹ 41.8	41.23	35.45
	1923	34	195	.849	148	.849	5.7	52.6	46.0	44.66	39.09
Breast or brisket breakers and sawyers.	1917	28	43	.291	100	.298			50.9		15.20
	1921	20	32	.504	173	.526	¹ 5.5	47.6	¹ 41.8	23.99	¹ 22.60
	1923	27	57	.518	178	.523	5.8	52.7	46.2	27.30	24.17
Crotch breakers.....	1917	15	20	.266	100	.268			52.1		13.94
	1921	17	22	.495	186	.532	5.6	47.8	43.2	23.66	22.97
	1923	20	30	.490	184	.501	5.6	51.8	44.5	25.38	22.29
Hoisters.....	1917	30	89	.254	100	.264			48.9		12.92
	1921	27	91	.470	185	.498	¹ 5.4	47.9	¹ 40.6	22.51	¹ 20.23
	1923	27	96	.467	184	.476	5.6	52.1	46.9	24.33	22.34
Tail rippers and pullers.....	1917	28	45	.271	100	.284			54.8		15.57
	1921	22	31	.495	183	.523	5.2	48.1	40.0	23.81	20.91
	1923	24	45	.478	176	.492	5.7	52.2	45.7	24.95	22.49
Rumpers.....	1917	40	65	.449	100	.468			50.4		23.57
	1921	30	51	.712	159	.743	¹ 5.6	47.8	¹ 43.8	34.03	¹ 32.52
	1923	31	64	.721	161	.740	5.7	52.3	46.7	37.71	34.52
Fell cutters.....	1917	28	78	.335	100	.340			50.9		17.30
	1921	21	54	.553	165	.597	5.4	47.6	39.1	26.32	23.32
	1923	22	91	.579	173	.584	5.6	52.4	45.6	30.34	26.63
Fell pullers and beaters.....	1917	22	68	.261	100	.267			51.5		13.74
	1921	21	44	.478	183	.506	5.2	47.8	38.8	22.85	19.65
	1923	23	68	.466	179	.478	5.4	52.9	44.5	24.65	21.26
Backers.....	1917	43	71	.517	100	.511			50.3		25.71
	1921	28	54	.895	173	.839	¹ 5.5	48.1	¹ 41.3	43.05	¹ 34.64
	1923	31	85	.773	150	.778	5.6	52.5	45.1	40.58	35.09
Gutters and bung drop-pers.	1917	46	97	.315	100	.319			50.1		16.04
	1921	29	55	.542	172	.580	¹ 5.4	47.8	¹ 40.3	25.93	¹ 23.63
	1923	33	94	.545	173	.554	5.8	52.5	47.5	28.61	26.33
Shank skimmers.....	1917	10	21	.311	100	.307			55.5		17.09
	1921	5	7	.571	184	.578	5.7	46.9	44.6	26.78	25.78
	1923	7	15	.534	172	.538	5.7	53.1	44.3	28.36	23.83
Hide droppers.....	1917	42	98	.401	100	.397			50.8		20.17
	1921	30	72	.687	171	.666	¹ 5.4	47.9	¹ 41.1	32.91	¹ 27.36
	1923	32	107	.660	165	.652	5.6	52.6	46.6	34.72	30.41
Tail sawyers.....	1917	37	93	.322	100	.325			51.4		16.68
	1921	29	62	.547	170	.579	¹ 5.5	48.0	¹ 42.0	26.26	¹ 24.16
	1923	27	106	.535	166	.552	5.5	52.4	45.6	28.03	25.13
Splitters.....	1917	47	118	.600	100	.591			50.6		29.89
	1921	29	82	.855	143	.855	¹ 5.7	47.8	¹ 42.9	40.87	¹ 36.63
	1923	33	108	.837	140	.857	5.8	52.5	47.9	43.94	41.08
Chuck splitters.....	1917	33	52	.365	100	.361			51.9		18.74
	1921	20	27	.597	164	.602	5.7	47.9	42.6	28.60	25.68
	1923	28	58	.608	167	.611	5.8	52.6	47.8	31.98	29.17
Scribers.....	1917	29	38	.266	100	.271			56.4		15.26
	1921	22	27	.483	182	.513	5.6	47.6	42.8	22.99	21.92
	1923	27	39	.475	179	.485	5.8	52.3	48.6	24.84	23.54
Trimmers (bruises, rounds, skirts, and tails).	1917	28	104	.275	100	.273			54.7		14.92
	1921	24	100	.473	172	.490	5.5	47.7	42.6	22.56	20.87
	1923	25	166	.458	167	.465	5.8	52.6	47.4	24.09	22.06

¹ Not including data for 1 establishment in which employees were paid biweekly.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
CATTLE-KILLING DEPARTMENT—concluded											
Males—Concluded											
Utility men.....	1917	33	88	\$0.353	100	\$0.360			53.2		\$19.05
	1921	19	37	.609	173	.608	5.5	47.8	43.8	\$29.11	26.65
	1923	25	74	.561	159	.574	5.9	52.2	49.4	29.28	28.33
Washers and wipers.....	1917	44	356	.233	100	.236			51.4		12.14
	1921	29	216	.451	194	.473	5.3	47.8	40.1	21.56	18.96
	1923	31	320	.424	182	.458	5.6	52.5	42.7	22.26	19.59
Tonguers.....	1917	43	85	.293	100	.288			50.9		14.65
	1921	14	17	.562	192	.558	5.2	48.3	39.7	27.14	22.18
	1923	23	41	.503	172	.517	5.8	52.4	48.9	26.36	25.28
Laborers.....	1917	47	724	.232	100	.238			47.8		11.39
	1921	27	409	.452	195	.471	5.1	47.8	39.5	21.61	18.62
	1923	32	587	.427	184	.436	5.5	52.2	45.3	22.29	19.77
Truckers.....	1917	32	103	.228	100	.254			43.0		10.90
	1921	20	56	.456	200	.499	4.8	48.1	36.3	21.93	18.09
	1923	24	131	.423	186	.433	5.2	51.8	43.9	21.91	19.04
Females											
Carcass wipers, bruise and tail trimmers, and neck rag inserters and laborers.	1917	3	16	.157	100	.155			51.3		7.97
	1921	5	21	.340	217	.342	5.4	49.9	41.9	16.98	14.36
	1923	5	27	.316	208	.321	6.0	53.8	50.6	17.00	16.24
HOG-KILLING DEPARTMENT											
Males											
Laborers ¹	1917	55	1,356	.235	100	.237			46.9		11.14
	1921	29	524	.440	187	.451	5.4	48.8	42.1	21.47	18.99
	1923	32	820	.428	182	.444	5.5	52.2	48.5	22.34	21.54
Shacklers.....	1917	56	134	.305	100	.298			49.5		14.74
	1921	26	59	.523	171	.542	5.4	48.9	43.2	25.57	23.40
	1923	31	125	.535	175	.549	5.6	52.0	51.8	27.82	28.43
Stickers.....	1917	56	70	.359	100	.357			51.9		18.54
	1921	27	33	.610	170	.611	5.8	49.6	49.2	30.26	30.07
	1923	33	44	.621	173	.652	5.8	53.0	53.2	32.91	34.69
Scalders ²	1917	56	298	.294	100	.295			52.2		15.38
	1921	28	139	.498	169	.516	5.7	48.8	44.2	24.30	22.79
	1923	34	273	.479	163	.496	5.5	52.1	49.7	24.96	24.61
Hookers-on ³	1917	51	224	.284	100	.282			51.4		14.50
	1921	24	69	.501	176	.509	5.8	48.3	46.4	24.20	23.60
	1923	33	146	.473	167	.490	5.6	52.5	49.9	24.83	24.48
Shavers and scrapers.....	1917	57	846	.290	100	.290			48.7		14.10
	1921	27	303	.491	169	.502	5.6	48.9	43.8	24.01	21.99
	1923	34	587	.485	167	.497	5.5	52.5	49.3	25.46	24.49
Headers.....	1917	48	85	.347	100	.343			50.9		17.43
	1921	24	47	.580	167	.588	5.8	48.4	43.8	28.07	25.78
	1923	31	67	.577	166	.598	5.7	52.6	51.0	30.35	30.53
Gutters ⁵	1917	57	206	.338	100	.337			51.1		17.22
	1921	28	100	.563	167	.584	5.8	48.7	45.9	27.42	26.78
	1923	32	172	.555	164	.572	5.6	52.4	49.6	29.08	28.41
Ham facers.....	1917	43	56	.327	100	.328			52.5		17.19
	1921	26	34	.525	161	.541	5.7	48.8	43.8	25.62	23.69
	1923	28	38	.543	166	.561	5.8	52.2	50.9	28.34	28.55
Splitters.....	1917	56	143	.369	100	.364			52.0		18.92
	1921	27	68	.614	166	.621	5.7	48.8	44.4	29.96	27.58
	1923	33	119	.610	165	.627	5.9	52.3	53.5	31.90	33.54
Leaf lard pullers.....	1917	50	80	.304	100	.301			52.4		15.78
	1921	25	44	.511	168	.526	5.5	49.1	44.1	25.09	23.21
	1923	30	97	.504	166	.521	5.6	53.0	51.5	26.71	26.84
Leaf lard scrapers.....	1917	34	63	.248	100	.251			45.2		11.34
	1921	10	21	.433	175	.442	5.8	48.6	44.5	21.04	19.66
	1923	20	51	.431	174	.439	5.2	52.6	45.2	22.67	19.83

¹ Not including data for 1 establishment in which employees were paid biweekly.² Includes drivers, penners, steamers, singers, washers, and aitch-bone breakers.³ Includes tubmen, droppers, gamb cutters, polemen, and duckers.⁴ Includes hookers-off, hangers-off, straighteners, and feeders, chain.⁵ Including bung droppers and rippers-open.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
HOG-KILLING DEPARTMENT—concluded											
Males—Concluded											
Bruise trimmers, head removers, and kidney pullers.	1917	49	139	\$0.277	100	\$0.277			50.7		\$14.06
	1921	26	107	.492	178	.501	¹ 5.7	48.3	¹ 43.2	\$23.76	¹ 21.63
	1923	28	125	.465	168	.479	5.5	52.5	48.6	24.41	23.26
Utility men	1917	49	197	.329	100	.331			54.1		17.88
	1921	26	115	.556	169	.566	¹ 5.9	48.5	¹ 47.8	26.97	¹ 27.04
	1923	28	107	.562	171	.561	5.9	52.3	53.8	29.39	31.17
Truckers	1917	32	201	.239	100	.241			45.8		11.03
	1921	18	93	.439	184	.446	¹ 5.6	49.1	¹ 42.8	21.55	¹ 19.08
	1923	24	136	.429	179	.440	5.4	52.2	48.2	22.39	21.22
Females											
Kidney pullers, shavers, singers, neck brushers, and spreaders.	1917	3	24	.150	100	.150			39.0		5.83
	1921	8	23	.336	224	.351	¹ 5.9	48.0	¹ 45.5	16.13	¹ 15.98
	1923	12	27	.331	221	.341	5.1	51.4	41.7	17.01	14.23
CASING DEPARTMENT											
Males											
Casing pullers or runners	1917	59	597	.298	100	.296			53.1		15.71
	1921	32	408	.509	171	.526	¹ 5.4	48.5	¹ 44.0	24.69	¹ 23.12
	1923	34	548	.507	170	.518	5.7	52.3	49.5	26.52	25.67
Strippers	1917	49	305	.260	100	.262			53.3		13.95
	1921	28	203	.482	185	.483	¹ 5.6	47.9	¹ 41.9	23.09	¹ 20.25
	1923	32	313	.464	178	.474	5.6	52.7	48.7	24.45	23.07
Fatters and slimers	1917	52	571	.311	100	.312			54.1		16.88
	1921	30	336	.547	176	.547	¹ 5.5	48.4	¹ 42.3	26.47	¹ 23.12
	1923	29	427	.551	177	.611	5.6	52.9	48.7	29.15	29.77
Turners	1917	36	112	.260	100	.264			52.0		13.75
	1921	31	99	.494	190	.516	¹ 5.3	48.2	¹ 41.0	23.81	¹ 21.16
	1923	26	128	.470	181	.479	5.5	52.6	47.4	24.72	22.73
Blowers, graders, and inspectors.	1917	39	152	.266	100	.267			55.5		14.82
	1921	28	94	.478	180	.495	¹ 5.6	49.1	¹ 43.6	23.47	¹ 21.57
	1923	27	130	.472	177	.484	5.5	52.8	49.4	24.92	23.88
Measurers and bunchers	1917	30	62	.274	100	.283			58.6		16.59
	1921	26	59	.487	178	.512	5.6	48.4	45.1	23.57	23.08
	1923	23	65	.473	173	.486	5.8	53.0	51.4	25.07	24.94
Salters and packers	1917	40	190	.277	100	.278			58.3		16.19
	1921	27	132	.490	177	.502	¹ 5.7	48.1	¹ 45.5	23.57	¹ 22.84
	1923	30	158	.473	171	.479	5.8	52.6	51.8	24.88	24.79
Trimmers of casings	1917	50	299	.279	100	.280			53.4		14.94
	1921	29	163	.490	176	.510	¹ 5.7	48.1	¹ 43.7	23.57	¹ 22.25
	1923	32	213	.501	180	.508	5.8	52.0	50.1	26.05	25.46
Blowers and tiers of bladders and weasands.	1917	16	29	.268	100	.268			56.4		15.13
	1921	7	14	.482	180	.492	5.7	48.0	43.4	23.14	21.36
	1923	14	23	.465	174	.472	5.5	51.7	47.7	24.04	22.51
General workers	1917	58	410	.272	100	.275			52.7		14.52
	1921	27	121	.492	181	.512	5.6	49.5	44.1	24.35	22.55
	1923	34	313	.478	176	.490	5.6	52.3	50.9	25.00	24.93
Laborer	1917	30	307	.226	100	.228			53.5		12.19
	1921	20	108	.444	196	.462	¹ 5.6	48.7	¹ 42.3	21.62	¹ 19.54
	1923	27	165	.409	181	.418	5.3	52.6	45.5	21.51	19.01
Truckers	1917	15	47	.235	100	.238			48.4		11.53
	1921	16	55	.438	186	.445	5.6	48.8	42.1	21.37	18.74
	1923	16	116	.417	177	.430	5.6	53.1	47.6	22.14	20.46
Females											
Casing pullers or runners	1917	2	2	.195	100	.196			48.3		9.45
	1921	5	17	.391	201	.401	5.6	48.0	42.1	18.77	16.86
	1923	6	39	.374	192	.378	5.6	51.1	48.0	19.11	18.15
Strippers	1917	8	41	.363		.363	5.9	48.0	42.7	17.42	15.51
	1923	5	17	.354		.354	5.9	54.0	46.3	19.12	16.39
Fatters and slimers	1917	3	22	.151	100	.151			63.2		8.05
	1921	3	4	.395	262	.392	6.0	48.0	43.9	18.96	17.20
	1923	4	12	.394		.392	5.4	48.0	41.2	18.91	16.16
Turners	1917	4	32	.332		.339	4.4	53.8	40.1	17.86	13.57

¹ Not including data for 1 establishment in which employees were paid biweekly.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
CASING DEPARTMENT—concluded											
Females—Concluded											
Blowers, graders and inspectors.	1917	13	135	\$0.163	100	\$0.163			51.0		\$8.31
	1921	11	77	.353	217	.354	5.7	47.9	41.5	\$16.91	14.69
	1923	15	190	.342	210	.348	5.6	52.6	47.1	17.99	16.37
Measurers and bunchers	1917	2	7	.172	100	.170			47.6		8.09
	1921	4	12	.378	220	.377	5.9	48.0	44.9	18.14	16.95
	1923	8	64	.435	253	.437	5.8	53.3	47.6	23.19	20.81
Salters and packers	1917	4	14	.154	100	.160			47.6		7.62
	1921	5	12	.352	229	.352	6.0	48.0	42.8	16.90	15.08
	1923	6	16	.367	238	.375	6.0	54.0	50.9	19.82	19.08
Trimmers of casings	1917	14	104	.189	100	.187			50.0		9.33
	1921	16	54	.397	210	.398	5.6	48.1	40.9	19.10	16.28
	1923	12	71	.374	198	.378	5.8	52.6	48.8	19.67	18.44
Blowers and tiers of bladders and weasands.	1917	5	22	.157	100	.155			52.5		8.15
	1921	3	70	.353	225	.358	5.9	48.0	41.6	16.94	14.87
	1923	5	9	.367	234	.368	5.8	54.0	46.2	19.82	17.00
General workers	1917	8	46	.182	100	.181			44.1		7.97
	1921	10	50	.357	196	.358	5.2	49.2	39.4	17.54	14.17
	1923	12	199	.335	184	.341	5.4	54.1	44.7	18.12	15.23
SAUSAGE DEPARTMENT											
Males											
Truckers and forkers	1917	19	139	.229	100	.229			51.4		11.78
	1921	24	305	.449	196	.452	5.7	48.1	45.3	21.60	20.49
	1923	24	481	.422	184	.424	5.6	52.7	47.1	22.24	19.98
Cutters (choppers, grinders, mixers, curers, feeders, and machine tenders).	1917	55	253	.277	100	.275			56.4		15.54
	1921	31	193	.496	179	.501	5.9	48.6	47.8	24.11	23.97
	1923	35	329	.490	177	.499	5.8	52.6	50.8	25.77	25.35
Casing workers (washers, turners, re-turners, measurers, cutters, tiers, and fatters).	1917	31	107	.241	100	.241			55.3		13.35
	1921	19	36	.461	191	.469	6.0	48.3	47.5	22.27	22.27
	1923	22	75	.451	187	.457	5.8	51.3	52.1	23.14	23.82
Stuffers	1917	57	444	.298	100	.295			51.7		15.23
	1921	31	225	.535	180	.536	5.8	48.8	46.0	26.11	24.69
	1923	36	316	.532	179	.541	5.7	52.6	49.3	27.98	26.67
Linkers, twistlers, tiers, and hangers.	1917	13	103	.248	100	.250			49.7		12.41
	1921	6	45	.460	185	.475	5.9	48.0	49.7	22.08	23.57
	1923	17	138	.458	185	.465	5.7	52.4	51.0	24.00	23.70
Ropers, wrappers, and tiers.	1917	5	10	.247	100	.259			50.0		12.92
	1921	2	2	.523	212	.597	4.5	48.0	36.0	25.10	18.09
	1923	9	23	.428	177	.434	5.9	52.2	48.8	22.86	21.18
Laborers	1917	52	1,022	.228	100	.228			57.0		13.03
	1921	32	528	.448	196	.449	5.6	48.2	44.7	21.59	20.06
	1923	33	777	.422	185	.428	5.6	52.4	48.1	22.11	20.62
Cookers	1917	48	119	.270	100	.269			60.2		16.19
	1921	30	99	.479	177	.484	5.7	49.0	48.8	23.47	23.61
	1923	30	139	.474	176	.485	5.9	52.2	52.0	24.74	25.19
Smokers	1917	50	90	.282	100	.281			62.9		17.68
	1921	28	73	.508	180	.528	6.0	48.9	50.7	24.84	26.77
	1923	33	114	.507	180	.529	6.0	52.8	54.0	26.67	28.59
Packers (scalers and packers, shippers, and nailers).	1917	43	376	.232	100	.238			54.7		12.99
	1921	29	251	.461	199	.466	5.8	48.4	45.9	22.31	21.40
	1923	33	328	.447	193	.453	5.9	52.9	49.8	23.65	22.56
Utility men (assistant foremen, straw bosses, subforemen, handy-men, small-order men, all-round men).	1917	36	108	.291	100	.290			60.8		17.60
	1921	24	82	.523	180	.529	5.6	48.4	46.0	25.32	24.34
	1923	21	71	.419	144	.581	5.9	52.3	52.1	21.91	30.22
Females											
Cutters (choppers, grinders, mixers, curers, feeders, and machine tenders).	1917	2	3	.173	100	.177			40.4		7.17
	1921	2	3	.360	208	.360	6.0	46.0	44.0	16.56	15.84
	1923	6	8	.323	187	.330	4.8	53.4	36.3	17.25	12.00

¹ Not including data for 1 establishment in which employees were paid biweekly.

² Including roustabouts, ham-cylinder washers, cleaners-up, ham pressers, hangers, cook's helpers, smoker's helpers, truckers of cages or bikes.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
SAUSAGE DEPARTMENT—concluded											
Females—Concluded											
Casing workers (washers, turners, re-turners, measurers, cutters, tiers, and fatters).	1917	32	317	\$0.175	100	\$0.175			50.7		\$8.85
	1921	21	142	.364	208	.366	5.7	48.6	43.5	\$17.69	15.93
	1923	27	353	.339	194	.341	5.5	52.8	44.6	17.90	15.23
Stuffers	1917	10	46	.200	100	.191			53.6		10.24
	1921	8	42	.400	200	.402	5.8	49.4	45.1	19.76	18.14
	1923	7	50	.397	199	.405	5.8	53.0	54.0	21.04	21.89
Linkers, twisters, tiers, and hangers.	1917	42	719	.181	100	.179			46.4		8.31
	1921	28	379	.378	209	.387	5.7	49.4	43.3	18.67	16.38
	1923	34	821	.355	196	.359	5.5	52.4	45.2	18.60	16.21
Ropers, wrappers and tiers.	1917	10	137	.162	100	.163			50.0		8.14
	1921	8	123	.385	238	.388	5.6	48.0	44.3	18.48	17.20
	1923	17	253	.383	236	.364	5.6	53.1	45.5	20.34	16.57
Cookers	1921	2	3	.325		.325	5.7	48.0	46.2	15.60	14.96
	1923	2	3	.343		.353	5.0	56.0	41.5	19.21	14.64
Packers (wrappers, inspectors, labelers, taggers, tiers, box makers, and packers' helpers.	1917	39	421	.158	100	.158			50.1		7.90
	1921	25	259	.328	208	.329	5.7	48.1	43.9	15.78	14.46
	1923	28	398	.304	192	.308	5.6	52.5	43.8	15.96	13.47
General workers (box makers, labelers, laborers, sorters, and utility workers).	1917	22	134	.167	100	.170			48.3		8.21
	1921	24	102	.337	202	.339	5.7	48.0	43.8	15.14	16.16
	1923	26	276	.335	201	.336	5.6	52.0	45.5	17.42	15.31
CANNING DEPARTMENT											
Males											
Cookers	1917	11	42	.254	100	.255			67.7		17.29
	1921	8	14	.465	183	.476	5.7	48.3	48.8	22.46	23.21
	1923	6	31	.447	176	.477	5.8	53.4	54.6	23.87	26.06
Steam tenders, process men, and retort men.	1917	11	50	.256	100	.256			64.8		16.60
	1921	4	7	.483	189	.485	5.7	47.4	47.9	22.89	23.23
	1923	6	33	.447	175	.464	5.5	53.6	51.4	23.96	23.87
Passers and pilers, cans.	1917	7	68	.227	100	.229			54.3		12.41
	1923	5	133	.439	193	.442	5.6	53.9	48.6	23.66	21.52
Trimmers, meat (by hand).	1917	4	43	.247	100	.246			65.2		16.06
	1921	8	15	.441	179	.442	6.0	47.8	48.1	21.08	21.27
	1923	4	28	.459	186	.458	5.9	50.6	50.1	23.23	22.98
Machine tenders (preparing and stuffing meat into cans).	1917	11	99	.247	100	.247			61.8		15.24
	1921	9	35	.478	194	.482	5.9	48.1	46.7	22.99	22.51
	1923	15	79	.442	179	.467	5.6	53.1	52.7	23.47	24.61
Stuffers (meat into cans by hand).	1917	6	100	.234	100	.237			51.1		12.12
	1921	3	6	.458	196	.461	5.7	48.0	45.9	21.19	21.15
	1923	6	42	.437	187	.446	5.3	53.9	45.4	23.55	20.22
Packers	1917	9	190	.245	100	.244			59.1		14.45
	1921	8	33	.466	190	.465	5.9	47.6	45.7	22.18	21.27
	1923	11	92	.425	173	.431	5.7	53.2	49.0	22.61	21.12
Cappers	1917	12	177	.252	100	.255			54.2		13.81
	1921	11	33	.476	189	.477	5.8	47.5	45.5	22.61	21.73
	1923	8	44	.455	181	.467	5.5	52.6	51.3	23.93	24.00
Washing and painting machine tenders.	1917	5	9	.271	100	.268			71.3		19.11
	1921	5	7	.451	166	.442	5.9	47.6	48.7	21.47	21.54
	1923	2	6	.438	162	.447	5.0	54.0	42.7	23.65	19.06
General workers.	1917	8	411	.237	100	.238			55.0		13.12
	1921	7	59	.504	213	.510	5.9	46.0	45.2	23.19	23.03
	1923	8	60	.474	200	.485	5.7	50.8	51.7	24.08	25.10
Inspectors	1917	10	257	.258	100	.260			58.2		15.10
	1921	7	29	.482	187	.486	6.0	47.6	47.8	22.94	23.26
	1923	6	128	.459	178	.474	5.6	54.0	50.2	24.79	23.80
Truckers	1917	9	154	.230	100	.231			56.4		13.02
	1921	12	70	.449	195	.450	5.9	47.3	46.3	21.24	20.85
	1923	14	426	.424	184	.431	5.5	53.4	48.2	22.64	20.76
Laborers	1917	9	1,530	.228	100	.229			57.2		13.16
	1921	13	98	.442	194	.443	5.5	45.6	42.7	20.10	18.86
	1923	9	226	.430	189	.444	5.1	53.7	47.1	23.09	20.90

¹ Not including data for 1 establishment in which employees were paid biweekly.

WAGES AND HOURS OF LABOR

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HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
CANNING DEPARTMENT—concluded											
Females											
Machine tenders (preparing and stuffing meat into cans).	1917	6	19	\$0.167	100	\$0.167			51.9		\$8.65
	1921	6	30	.355	213	.354	5.8	47.3	44.8	\$16.79	15.86
	1923	6	25	.313	187	.314	5.9	52.3	45.3	16.37	14.22
Stuffers (meat into cans by hand).	1917	7	283	.168	100	.168			51.5		8.65
	1921	6	28	.377	224	.385	5.8	48.3	45.1	18.21	17.35
	1923	3	91	.334	199	.347	5.6	54.0	47.3	18.04	16.42
Packers (sliced bacon and chipped dried beef in cans, glass jars, or cartons, by hand).	1917	9	233	.167	100	.168			50.0		8.43
	1921	13	202	.338	202	.337	5.7	47.0	44.0	15.90	14.85
	1923	15	228	.352	211	.352	5.6	51.8	44.1	18.23	15.51
Cappers	1917	5	142	.172	100	.172			52.1		8.94
	1921	5	18	.365	212	.367	5.1	47.3	38.9	17.26	14.28
	1923	4	45	.328	191	.365	5.7	53.7	46.2	17.61	16.85
Labelers and wrappers	1917	10	457	.199	100	.200			55.5		11.12
	1921	12	68	.376	189	.376	5.5	47.9	43.8	17.98	16.35
	1923	12	237	.360	181	.372	5.3	53.1	45.7	19.12	17.01
Weighers (filled cans)	1917	9	141	.169	100	.170			49.5		8.41
	1921	9	33	.341	202	.342	5.8	47.6	44.7	16.23	15.27
	1923	4	68	.324	192	.364	5.5	53.6	42.1	17.37	15.33
Wipers (filled cans)	1917	4	88	.158	100	.161			50.7		8.15
	1921	2	2	.328	208	.375	6.0	48.0	45.0	15.74	16.88
	1923	4	54	.309	196	.309	5.2	54.1	42.5	16.72	13.13
Cap setters	1917	5	44	.161	100	.162			49.6		8.02
	1921	3	5	.306	190	.305	5.8	48.0	44.6	14.69	13.62
	1923	2	3	.283	176	.283	6.0	56.0	47.0	15.85	13.28
Washers of empty cans	1917	5	38	.182	100	.182			49.4		8.99
	1921	4	11	.286	157	.290	4.9	48.0	39.6	13.73	11.48
	1923	5	24	.304	167	.313	5.4	54.0	42.9	16.42	13.43
Passers and pilers, cans	1917	9	219	.155	100	.155			47.6		7.37
	1921	3	12	.322	208	.320	5.8	48.0	44.2	15.46	14.16
	1923	5	135	.337	217	.367	5.2	54.1	42.9	18.23	15.77
Trimmers, meat (by hand)	1917	7	244	.168	100	.169			50.9		8.59
	1921	5	45	.324	193	.327	5.3	48.4	42.4	15.68	13.86
	1923	5	115	.356	212	.353	5.7	53.2	46.9	18.94	16.57
General workers	1917	10	628	.163	100	.164			50.1		8.23
	1921	10	112	.345	212	.346	5.6	46.7	42.8	16.11	14.83
	1923	13	227	.307	188	.315	5.1	53.9	41.1	16.55	12.96
CATTLE-KILLING DEPARTMENT											
Males											
All occupations	1917	54	3,292	.313	100	.318			50.1		15.95
	1921	30	2,077	.550	176	.570	5.4	47.9	40.7	26.35	23.19
	1923	34	3,250	.532	170	.544	5.6	52.4	45.9	27.88	24.99
Females											
All occupations	1917	3	16	.157	100	.155			51.3		7.97
	1921	5	21	.340	217	.342	5.4	49.9	41.9	16.98	14.36
	1923	5	27	.316	208	.321	6.0	53.8	50.6	17.00	16.24
HOG-KILLING DEPARTMENT											
Males											
All occupations	1917	57	4,098	.279	100	.281			49.1		13.79
	1921	29	1,756	.493	177	.507	5.6	48.8	43.8	24.06	22.23
	1923	34	2,907	.483	173	.499	5.5	52.3	49.7	25.26	24.82
Females											
All occupations	1917	3	24	.150	100	.150			39.0		5.83
	1921	8	23	.336	224	.351	5.9	48.0	45.5	16.13	15.98
	1923	12	27	.331	221	.341	5.1	51.4	41.7	17.01	14.23

¹ Not including data for 1 establishment in which employees were paid biweekly.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
SHEEP-KILLING DEPARTMENT											
Males											
All occupations.....	1917	31	1,063	\$0.309	100	\$0.314			47.1		\$14.81
	1921	21	954	.566	183	.585	¹ 5.6	48.3	¹ 40.7	\$27.34	¹ 23.85
	1923	19	1,191	.507	164	.523	5.5	52.6	44.6	26.67	23.32
Females											
All occupations.....	1917	2	6	.158	100	.155			44.1		6.82
	1921	2	5	.368	233	.377	6.0	48.0	40.2	17.66	15.15
	1923										
OFFAL (OTHER THAN HIDES AND CASINGS)											
Males											
All occupations.....	1917	62	3,637	.274	100	.272			52.5		14.27
	1921	33	2,034	.485	177	.499	¹ 5.6	48.0	¹ 43.0	23.28	¹ 21.44
	1923	37	3,256	.475	174	.488	5.6	52.2	48.4	24.80	23.61
Females											
All occupations.....	1917	17	310	.175	100	.174			45.2		7.89
	1921	22	241	.365	209	.367	5.5	47.9	41.0	17.48	15.04
	1923	22	509	.350	200	.354	5.5	52.6	45.3	18.52	16.05
HIDE DEPARTMENT											
Males											
All occupations.....	1917	55	1,218	.246	100	.252			48.9		12.33
	1921	30	814	.465	189	.470	¹ 5.4	48.1	¹ 42.0	22.37	¹ 19.75
	1923	34	1,357	.447	182	.455	5.4	52.3	45.7	23.38	20.80
CASING DEPARTMENT											
Males											
All occupations.....	1917	62	3,081	.278	100	.279			53.8		15.03
	1921	32	1,792	.499	179	.512	¹ 5.3	48.4	¹ 43.2	24.15	¹ 22.10
	1923	34	2,599	.488	176	.507	5.6	52.6	40.2	25.67	24.94
Females											
All occupations.....	1917	22	352	.172	100	.171			49.8		8.51
	1921	20	349	.366	213	.369	¹ 5.7	48.2	¹ 41.5	17.64	¹ 15.28
	1923	21	637	.355	206	.361	5.6	53.2	46.3	18.89	16.74
CUTTING OR FRESH BEEF DEPARTMENT											
Males											
All occupations.....	1917	53	6,294	.271	100	.266			55.9		14.87
	1921	31	2,955	.483	178	.492	¹ 5.7	48.2	¹ 44.5	23.28	¹ 21.90
	1923	35	4,328	.508	187	.526	5.6	52.9	51.9	26.87	27.28
Females											
All occupations.....	1917	4	49	.162	100	.160			48.9		7.82
	1921	2	10	.308	190	.286	¹ 6.0	51.0	¹ 54.0	15.71	¹ 15.44
	1923	8	63	.364	225	.371	5.3	54.3	47.1	19.77	17.48
CUTTING OR FRESH PORK DEPARTMENT											
Males											
All occupations.....	1917	61	4,461	.271	100	.271			51.7		13.98
	1921	31	2,810	.513	189	.516	¹ 5.6	48.9	¹ 44.1	25.09	¹ 22.76
	1923	35	4,989	.492	182	.503	5.6	52.1	49.4	25.63	24.86

¹ Not including data for 1 establishment in which employees were paid biweekly.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
CUTTING OR FRESH PORK DEPARTMENT—concl'd.											
Females											
All occupations.....	1917	38	1,066	\$0.217	100	\$0.218			41.3		\$9.00
	1921	23	655	.402	185	.406	¹ 5.6	48.7	¹ 41.5	\$19.58	¹ 16.83
	1923	25	731	.470	217	.473	5.5	53.1	45.4	24.96	21.46
LARD AND OLEO OIL DEPARTMENT											
Males											
All occupations.....	1917	61	1,727	.243	100	.246			55.4		13.60
	1921	33	1,561	.462	190	.466	¹ 5.7	48.5	¹ 46.3	22.41	¹ 21.58
	1923	37	1,919	.444	183	.452	5.7	52.3	50.3	23.22	22.71
Females											
All occupations.....	1917	19	90	.161	100	.160			50.6		8.09
	1921	18	107	.312	194	.314	5.7	48.8	43.6	15.23	13.70
	1923	26	219	.304	189	.308	5.5	52.3	46.5	15.90	14.29
SAUSAGE DEPARTMENT											
Males											
All occupations.....	1917	58	2,771	.252	100	.252			55.6		14.00
	1921	32	1,839	.474	188	.478	¹ 5.8	48.4	¹ 46.2	22.94	¹ 22.09
	1923	37	2,791	.454	180	.466	5.7	52.5	49.4	23.84	23.02
Females											
All occupations.....	1917	48	1,777	.172	100	.171			48.7		8.33
	1921	30	1,053	.361	210	.363	¹ 5.7	48.7	¹ 43.7	17.58	¹ 15.86
	1923	35	2,162	.344	200	.346	5.5	52.6	45.1	18.09	15.50
CURED-MEATS DEPARTMENT											
Males											
All occupations.....	1917	62	6,941	.252	100	.253			55.6		14.05
	1921	34	4,516	.463	184	.467	¹ 5.7	48.4	¹ 45.6	22.41	¹ 21.31
	1923	38	6,794	.445	177	.454	5.7	52.1	49.8	23.18	22.62
Females											
All occupations.....	1917	40	286	.171	100	.172			48.5		8.33
	1921	25	218	.320	187	.325	¹ 5.6	48.4	¹ 42.4	15.49	¹ 13.79
	1923	26	281	.315	184	.319	5.5	51.7	43.2	16.29	13.81
CANNING DEPARTMENT											
Males											
All occupations.....	1917	14	3,130	.236	100	.237			57.3		13.61
	1921	17	406	.465	197	.467	5.9	47.4	45.9	22.04	21.45
	1923	20	1,328	.437	185	.448	5.5	53.3	49.0	23.29	21.94
Females											
All occupations.....	1917	12	2,536	.171	100	.173			51.2		8.83
	1921	18	566	.345	202	.346	5.6	47.3	43.5	16.32	15.05
	1923	18	1,252	.337	197	.349	5.4	53.3	44.2	17.96	15.40

¹ Not including data for 1 establishment in which employees were paid biweekly.

HOURS, WAGES, AND EARNINGS OF EMPLOYEES IN THE SLAUGHTERING AND MEAT-PACKING INDUSTRY IN THE UNITED STATES, 1917, 1921, AND 1923, BY DEPARTMENT, SEX, AND OCCUPATION—Concluded

Department, sex, and occupation	Year	Number of establishments	Number of employees	Wages per hour		Average earnings per hour	Average number of days worked in one week	Average basic or regular hours per week	Average hours actually worked in one week	Average full-time earnings per week	Average earnings actually received in one week
				Average rate	Index numbers 1917=100						
MAINTENANCE AND REPAIR DEPARTMENT											
Males											
All occupations-----	1917	66	11,387	\$0.288	100	\$0.289			56.2		\$16.25
	1921	34	5,455	.565	196	.567	¹ 5.8	48.4	¹ 46.0	\$27.35	¹ 26.00
	1923	38	6,663	.551	191	.560	5.8	51.0	48.6	28.10	27.34
NONPRODUCTIVE EMPLOYEES ALL DEPARTMENTS											
Males											
All occupations-----	1917	60	1,989	.250	100	.252			59.7		15.05
	1921	33	1,106	.470	188	.477	¹ 5.8	48.4	¹ 46.4	22.76	¹ 22.14
	1923	38	1,711	.444	178	.460	5.8	52.2	52.0	23.18	23.91
Females											
All occupations-----	1917	13	70	.158	100	.158			51.1		8.10
	1921	15	86	.337	213	.337	5.8	48.1	43.2	16.24	14.38
	1923	22	204	.323	204	.323	5.6	52.5	46.3	16.96	14.96
TOTAL, ALL DEPARTMENTS NAMED ABOVE											
Males											
All occupations-----	1917	66	55,089	.271	100	.271			54.3		14.71
	1921	34	30,075	.504	189	.511	¹ 5.5	48.4	¹ 43.2	24.39	¹ 22.10
	1923	38	45,083	.487	180	.499	5.6	52.2	49.1	25.42	24.51
Females											
All occupations-----	1917	51	6,582	.179	100	.178			53.4		14.00
	1921	31	3,334	.362	202	.365	¹ 5.7	48.3	¹ 44.3	23.76	¹ 22.04
	1923	37	6,112	.356	199	.361	5.5	52.8	45.1	18.80	16.28
GRAND TOTAL											
Males and females											
All occupations-----	1917	66	61,671	.262	100	.262			53.6		14.00
	1921	34	33,409	.489	187	.497	¹ 5.5	48.4	¹ 43.1	23.67	¹ 21.85
	1923	38	51,195	.472	180	.484	5.6	52.3	48.7	24.63	23.55

¹ Not including data for 1 establishment in which employees were paid biweekly.

Earnings of Male and Female Workers in Massachusetts Manufacturing Establishments, February, 1924

THE following statistics from the Massachusetts Department of Labor and Statistics show the number of male and female employees in 395 establishments in that State for a week in February, 1924, and the average weekly earnings of these workers for the same period:

EMPLOYMENT AND EARNINGS OF MALE AND FEMALE WORKERS IN REPRESENTATIVE MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS IN FEBRUARY, 1924

Industry	Number of establishments reporting	Number of employees on pay roll		Average weekly earnings	
		Males	Females	Males	Females
Automobiles, including bodies and parts.....	6	1,587	74	\$28.95	\$19.72
Boot and shoe cut stock and findings.....	30	868	305	25.55	14.34
Boots and shoes.....	32	5,248	3,712	25.84	19.00
Boxes, paper.....	15	2,019	1,701	28.78	19.18
Bread and other bakery products.....	17	1,548	625	26.55	13.17
Cars and general shop construction and repairs, steam railroad companies.....	3	2,913	28	30.97	26.32
Clothing, men's.....	15	353	695	31.53	15.10
Clothing, women's.....	18	91	884	33.84	16.75
Confectionery.....	7	903	1,700	23.07	15.00
Cotton goods.....	7	1,573	1,391	24.61	19.20
Cutlery and tools.....	9	1,046	112	27.35	18.08
Dyeing and finishing, textiles.....	7	3,505	1,075	25.24	14.63
Electrical machinery, apparatus, and supplies.....	4	7,977	1,520	29.42	19.32
Foundry and machine shop products.....	19	3,790	175	28.14	17.57
Furniture.....	12	1,114	150	30.13	17.36
Hosiery and knit goods.....	4	263	729	28.67	15.83
Jewelry.....	12	435	177	26.91	14.70
Leather, tanned, curried, and finished.....	13	3,564	236	28.16	16.00
Machine tools.....	7	1,952	205	28.16	17.20
Musical instruments.....	5	408	48	35.06	13.61
Paper and wood pulp.....	15	2,865	916	29.81	16.05
Printing and publishing, book and job.....	26	668	220	35.92	18.55
Printing and publishing, newspaper.....	11	329	58	33.25	28.53
Rubber goods.....	6	2,263	427	25.36	14.22
Rubber tires and tubes.....	2	3,050	680	30.44	20.22
Silk goods.....	8	882	1,230	25.28	15.93
Slaughtering and meat packing.....	3	1,246	78	21.56	12.27
Stationery goods.....	6	251	347	27.54	17.35
Tobacco.....	5	574	248	27.30	17.23
Woolen and worsted goods.....	15	2,542	2,149	28.88	18.06
All other industries.....	56	19,581	4,307	30.70	16.99
Total.....	395	75,408	26,162	28.71	17.23

Working Time in New York State Factories ¹

THE standard weekly hours of male and female shop workers in New York State factories in 1923 are shown in the following table:

STANDARD WEEKLY HOURS OF SHOP WORKERS IN REPRESENTATIVE FACTORIES IN NEW YORK STATE, 1923

Industry	New York City								
	Men: Per cent working—					Women: Per cent working—			
	44 hours or less	45 to 48 hours	49 to 51 hours	52 to 54 hours	Over 54 hours	44 hours or less	45 to 48 hours	49 to 51 hours	52 to 54 hours
Stone, clay, and glass products	47.9	10.8	15.7	25.6			70.7		29.3
Metals, machinery, and conveyances	2.6	79.3	11.4	3.5	3.2	0.6	86.1	13.3	
Wood manufactures	19.4	41.0	33.9	(¹)	5.7	14.7	77.8	7.5	
Furs, leather, and rubber goods	51.1	38.5	8.6		1.8	49.0	42.4	7.1	1.5
Chemicals, oils, paints, etc.	7.0	49.0	32.0	9.6	2.4	14.4	38.3	24.6	22.7
Paper ²									
Printing and paper goods	57.6	33.1	8.5	.5	.3	31.4	42.7	25.9	
Textiles	2.8	69.2	11.1	11.8	5.1	1.9	87.7	8.8	1.6
Clothing, millinery, laundering, etc.	65.5	29.2	4.2	1.1		50.0	39.4	9.4	1.2
Food, beverages, and tobacco	(¹)	65.8	6.3	12.3	15.6	3.4	45.5	36.1	15.0
Water, light, and power		24.2		17.4	58.4				
Total ³	29.9	51.3	11.1	3.9	3.8	32.4	49.1	15.1	3.4
Industry	Remainder of State								
	44 hours or less	45 to 48 hours	49 to 51 hours	52 to 54 hours	Over 54 hours	44 hours or less	45 to 48 hours	49 to 51 hours	52 to 54 hours
Stone, clay, and glass products	0.5	11.1	34.3	18.3	35.8		3.6	91.6	4.8
Metals, machinery, and conveyances	1.2	46.6	26.2	10.8	15.2	0.8	54.9	36.8	7.5
Wood manufactures	2.0	28.3	30.5	17.3	21.9	6.6	34.0	35.8	23.6
Furs, leather, and rubber goods		23.7	52.9	11.4	12.0	.7	29.8	51.7	17.8
Chemicals, oils, paints, etc.		65.2	27.8	2.6	4.4	.7	77.3	18.8	3.2
Paper ²		78.0	2.8	12.7	6.5		37.4	38.9	23.7
Printing and paper goods	13.4	60.0	25.7	.9		13.2	38.8	46.2	1.8
Textiles		39.4	20.9	28.2	11.5		40.0	30.3	29.7
Clothing, millinery, laundering, etc.	37.6	6.8	11.4	35.8	8.4	17.5	14.4	54.7	13.4
Food, beverages, and tobacco	1.4	34.1	13.2	12.9	38.4	2.8	13.3	33.2	50.7
Water, light, and power	58.5	6.5		35.0					
Total ³	3.6	42.3	25.4	13.3	15.4	5.4	33.3	40.2	21.1

¹ Less than one-tenth of 1 per cent.

² Number of employees too small to be shown separately for New York City.

³ Weighted according to the relative importance of the industries in the United States Census of Manufactures for 1919.

The Eight-Hour Day in Belgium ²

A BILL was introduced in the Belgian Chamber of Representatives January 31, 1924, by M. Moyersoen, Minister of Industry and Labor, amending the law of June 14, 1921, on the 8-hour day and 48-hour week. It was considered that the 8-hour law was not sufficiently elastic, since an inquiry by the Department of Industry and Labor had shown that the average yearly hours of work in manufacturing establishments was only 2,320 out of a possible 2,440, due to a variety of causes, such as holidays, inventory, lack of raw materials, weather, breakdown of machinery and motors, interruptions to the transmission of electrical power, etc.

¹ New York. Department of Labor. The Industrial Bulletin, February, 1924.

² Revue du Travail, Brussels, Jan. 31, 1924, pp. 209-211. L'Information Sociale, Paris, Feb. 28, 1924, p. 4.

Under the original law, supplementary hours were allowed only through a decree issued upon the recommendation of the Superior Industrial Council or by an agreement between the owners of the enterprises and a majority of the workers. The amendment proposed that an additional 120 hours should be allowed annually to each enterprise, provided the daily hours of work did not exceed 10 and that the inspector of labor or the engineer of mines was notified each time. It was also proposed that when the manager of an undertaking and a majority of the workers agreed, a weekly half-holiday could be established, the time to be made up on the other days of the week. Another bill lengthening the hours of work, which was introduced previously by a deputy of the Liberal Party, was debated in Parliament at the same time as the Government bill. The former bill was defeated by a vote of 136 to 20 with 13 not voting, and the Government bill by a vote of 97 to 66 with 6 not voting. The two bills had aroused much opposition among the working people, who saw in them an attempt to abolish the 8-hour day.

Operation of Family Allowance Funds in France

AN ARTICLE on "Family allowances and clearing funds in France," by Prof. Paul H. Douglas in the February, 1924, issue of the *Quarterly Journal of Economics* (Cambridge) covers the subject in considerable detail. Certain sections of the article are here summarized as supplementary to the information published in "Some developments in the movement for family wages," in the *MONTHLY LABOR REVIEW* for October, 1921 (pp. 9-19), and "Extension of family wage system in France and Belgium," in the *MONTHLY LABOR REVIEW* for October, 1923 (pp. 1-17). In these two brief reports a description was given of the organization of compensation funds by groups of employers for the purpose of paying family allowances, in addition to wages, to workers with dependent children, these funds operating as clearing agencies to equalize the expenses for such allowances and to eliminate discrimination against married men by individual establishments. Professor Douglas reports that there were 120 of these clearing funds in June, 1923.¹ The following table from his article is a striking illustration of the increasing importance of such funds:

GROWTH OF FAMILY ALLOWANCE FUNDS IN FRANCE, 1918 TO 1923

[Franc at par=19.3 cents. Exchange rate varies]

Date	Approximate number of workmen covered	Annual rate of expenditure for family allowances	Date	Approximate number of workmen covered	Annual rate of expenditure for family allowances
		<i>Francs</i>			<i>Francs</i>
May, 1918.....	5,000	713,000	January, 1921.....	513,000	65,832,000
June, 1919.....	37,000	3,598,000	July, 1921.....	600,000	75,000,000
February, 1920.....	57,000	4,873,000	May, 1922.....	700,000	80,000,000
July, 1920.....	398,000	51,748,000	June, 1923.....	880,000	92,000,000

¹ In August, 1923, the number was 123. (*MONTHLY LABOR REVIEW*, October, 1923, p. 2.)

In 1922, only 160,000, or 23 per cent of the 700,000 employees of the members of the family allowance compensation funds, had dependent children of the ages coming under the provisions of the funds, while the average number of dependent children per family was 1.69. According to a report made by the French Minister of Labor in 1921, to which Professor Douglas refers, the proportion of the total employees under various funds who were fathers of families differed greatly, being only 5.6 per cent under one fund, while under certain others it was 13.6, 16, 40, and even 60 per cent. The percentage was especially low in the textile industry, in which there are so many woman and child workers.

The employers' assessments for the funds are based chiefly on (1) the number of workers employed, (2) the time worked, or (3) the total wage bill.² This last method is the one followed by the majority of funds.

In regard to the cost of allowances the following statement is made:

For all the funds, taken as a whole, the allowances amount to 2 per cent of the pay roll. At Roubaix-Turcoing, however, the allowances in 1921 were 7 per cent of the wages then paid, and 5.5 per cent of those paid in 1922. Were this fund excluded, the average for the remaining funds would amount to approximately 1.7 per cent. In the Parisian fund, where the sums paid are of about average liberality, the allowances were only about 1.3 per cent of the pay roll.

The amounts of these grants are not in proportion to the additional expense of the children to their parents. If the average wage of the French workman is estimated at 6,000 francs³ the average supplement to it for each of his children is approximately 3 per cent for the first child, 4 per cent for the second child, 5 per cent for the third child, and 6 per cent for the fourth child. These allowances are obviously inadequate. The Roubaix fund, however, pays an amount equal to about 25 per cent of the average father's wages for two dependent children, but, as indicated above, the assessments to this fund are very much higher than the average. Moreover, a substantial percentage of the workers in the Roubaix mills are women and children, which reduces the rates of dependents below the general average for the whole country. A very extended adoption of the Roubaix scale would probably mean an average cost of between 7 and 8 per cent of the pay roll.

Both clerical and manual workers, women as well as men, are paid allowances for dependent children.

Some funds grant allowances from the time the worker enters the plant of a member establishment. Others do not make these grants until after a month or more of employment. The worker who leaves a plant ordinarily gets no allowance for that month, although in some cases the allowance is continued if he goes to another establishment belonging to the same clearing fund. In the Roubaix and Paris funds, however, he is paid no allowance for the last month of work in the old plant nor for the first month in the new. As a rule, the system is planned "to stabilize" the working force. The Roubaix fund reports that its regulations have substantially reduced labor turnover.

² With the exception of agricultural funds, some of which use the average in their calculations.

³ Franc at par=19.3 cents. Exchange rate varies.

Since the funds wish to make a clear-cut distinction between family allowances and wages, they have held that in calculating the compensation to which an injured workman is entitled under the law family allowances should not be considered as a part of his wage. A substantial percentage of the funds continue these allowances when the workers are temporarily disabled, while other funds make these grants for specified periods to employees who are ill.

The method of dealing with short-time employment and unemployment varies in the different funds. A dozen or more handle the problem on a daily basis. For example, at Roubaix if a worker is prevented by conditions in the industry or establishment from working a complete month, his allowances are reduced according to the time lost by him. The greater number of funds make these grants "at least nominally on a monthly basis," but even such funds cut down the allowance in case of unwarranted absence from work.

It is probable that not many funds would pay allowances to strikers. At Roubaix men who voluntarily stay away from work, "whether individually as absentees or collectively as strikers, now lose their allowances not only for the time actually lost but for the remainder of the month as well." A representative of the Roubaix fund reports that this has resulted in the workers taking up their difficulties with their employers and not leaving the establishment except under unusual circumstances.

Changes in the structure and administration of clearing funds have been mainly in the interest of reducing the assessments of members to a minimum.

After a very brief experience the metallurgical fund at Grenoble decided not to increase its membership from the other industries on the ground that the employers requesting admission "were exclusively those who, by their family burdens, would benefit from an extension of the fund." This refusal was followed by the organization of various funds on an industrial basis. The tendency, of course, is for employers whose workers have few dependents to affiliate with employers whose family allowance burdens are also light. This consideration has been instrumental in bringing about a reorganization of a number of regional funds, among them the Paris fund. This is now divided into industrial and commercial sections, with separate assessment rates. The Nantes regional fund in July, 1923, had eight sections with the following assessments, which indicate the great variations in the numbers of dependents of workers in different industrial groups and the reason that industries in which employees have few dependents do not wish to ally themselves with industries in which the family burdens are heavy:

Section	Assessment per hour in centimes ¹
Food.....	2. 1
Building and public works.....	3. 5
Coal.....	3. 6
Commerce:	
First group, including wines, etc.....	2. 3
Second group, including novelties.....	. 6
Miscellaneous industry:	
First group.....	4. 5
Second group.....	1. 8
Metallurgy.....	4. 7

¹ One centime at par=0.193 cent. Exchange rate varies.

The following are among the arguments used in favor of single regional funds:

(1) An industry can employ women and children only if there are other industries in the locality which employ the head of the families. If these latter industries were not present, the others would be compelled to hire men and hence increase the number of dependents and the expense of the allowances. The advantages of employment are therefore reciprocal. (2) A considerable portion of the wages of the women and juveniles, by eking out the wages of the father, goes to the actual support of other members of the family. It is consequently only just that those industries which employ women and young people should pay part of the maintenance of the children. (3) The labor supply for an industry is drawn primarily not only from the children of those workmen engaged in that industry, but from the children of the locality as a whole. It is only proper that the various manufacturers should bear their share in meeting the expense of bringing up the local pool of labor from which the various industries will draw. (4) The establishment of a single fund for a region helps to eliminate the confusion caused by a number of separate industrial funds with varying scales of benefit and differing rules. The administration of infant welfare work and of family visiting is also much more effective if it is carried out by a regional fund, instead of by a number of industrial funds. The advantages of this uniformity, however, might be obtained to an almost equal degree by subdividing a regional fund into a number of separate but federated trade funds.

Despite these arguments, Professor Douglas states that "there has certainly been no diminution in the proportion of trade funds that have been formed."

Employers of women and children in regional funds have endeavored to effect a closer correspondence between the actual amount paid out by them in family allowances and their contributions to the fund based on the proportion of their wage bill to the total assessments. One fund decided on a reduced rate for every establishment having a wage bill of over 1,000,000 francs a quarter on the ground that these undertakings had a larger proportion of women and children in the working force. Other funds have applied a lower coefficient to the wages of women and juveniles than to the wages of men.

In the greater number of funds the member establishments pay the family allowances directly to their employees, the funds acting as clearing agencies. In some cases, however, the funds themselves pay the allowances. Under the majority of funds the family allowances are paid to the male head of the family when he is at work, but under a substantial number of funds the payments are made to the mother of the family. Many funds would prefer to follow the latter practice, but feel that it would meet with drastic objection from the men, "since it would tend to make the wives more independent financially of their husbands." When a father and mother of a family both work in establishments belonging to a fund, the allowance is divided between them. Special provisions are made in cases where juvenile workers are contributing to the support of their families. There are also regulations governing the payment of allowances when one member of a family is employed by an establishment belonging to a fund and another member of the family by a firm which is not affiliated with a fund.

The editor of the *Economic World*⁴ (New York), in commenting upon the article by Professor Douglas, predicts that this "novel theory and method of industrial wages which the French have been first to apply will certainly in the comparatively near future be much heard of in every important industrial and commercial country."

⁴ *Economic World*, New York, February, 1924, p. 255.

Wage Policy of the German Government ¹

IT has long been an open secret in Germany that the Federal Government is attempting not only to carry out a reduction of wages and salaries in its own administrative departments and establishments, but also to influence the wage policy of private employers in the same direction. It was noised about that the Federal Minister of Labor had expressed the opinion that wages must be kept below the pre-war level if the stabilization crisis is to be passed. It was even rumored that the conciliation boards had been instructed to render wage awards fixing wage rates at a maximum of two-thirds of the pre-war rates. All such rumors were of course promptly disavowed by the Government. As a matter of fact, however, the conciliation boards continued to render awards to this effect, just as if they had actually received such instructions. Employers in wage negotiations frequently insinuated that wages were being reduced in conformity with the wish of the Government. Thus, the employers of the Berlin transport industries, in order to justify a 25 per cent wage reduction, asserted that such a reduction was approved by the Federal ministries of Finance and of Labor. This assertion was followed by an energetic disavowal on the part of the Federal Minister of Finance, given out on January 19, 1924.

Two days later, on January 21, a Berlin paper (*Montag-Morgen*) published, however, a confidential letter of January 14, 1924, of the Federal Minister of Finance to the Federal Minister of Labor which justifies the just disavowed attempts to influence the wage policy of private employers and requests a like procedure on the part of the Minister of Labor. The letter, which bears the signature of Acting Minister (*Staatssekretär*) Von Schlieben, is as follows:

From memorials of several employers' associations received by me recently I have perceived that through awards made by legal conciliation boards private employers are being forced to pay considerably higher salaries and wages to their employees than the Federal Government since the introduction of gold mark accounting is paying to its statutory and nonstatutory employees and manual workers. I refer, for instance, to a letter received from the president of the Association of German Insurance Companies, dated December 12, 1923, and another letter from the Association of Berlin Exporters, dated December 19, 1923, of which you are said to have copies.

The statements made in these letters seem to me to be deserving of the fullest consideration. Rehabilitation of the financial situation of the German Commonwealth will be achievable only if private industry and business, through adjustment of their wage policy to the general distressing situation, bring about a reduction of prices and increased consumption. By doing so they will pave the road to prosperity and once more be able to compete in the world's markets. In connection therewith I wish to point out that only with a further lowering of the cost of living will it be possible to maintain the salary rates of Government employees now in force. In view of the absolutely inadequate funds at my disposal I regret being unable at present to permit an increase of these rates. You are aware that the introduction of the present salary and wage rates has met considerable opposition on the part of the economic organizations of the officials, salaried employees, and manual workers. On the other hand, serious disturbances in the Government service have up to the present been avoided, thanks to the discretion of the interested parties. The existing discontent and unrest would, however, gain in strength if workers in private employment should continue to receive disproportionately higher pay than those in the Government services.

¹Allgemeiner Deutscher Gewerkschaftsbund, *Gewerkschafts-Zeitung*, Berlin, Feb. 2, 1924; *Vorwärts*, Berlin, Jan. 21, 1924.

I therefore request that you will kindly bring influence to bear upon the conciliation boards that in their activities they shall consider the state of affairs described above. If you should take the view that such a step would not lead to the desired result, would it not seem necessary to restrict, by a decree to be issued in pursuance of the law giving to the Government extraordinary powers (*Ermächtigungsgesetz*), the activities of the conciliation boards in such a manner that in rendering wage awards they shall not fix higher salary and wage rates than those paid by the Federal Government except under special conditions.

In view of the importance and urgency of this matter I would be obliged if you would inform me at the earliest possible date of your attitude.

A copy of this letter has been sent to the Federal Ministers of National Economy, Transportation, and Posts.

On the same day on which this confidential letter of the Minister of Finance became known through the press, the Federal Minister of Labor published the following reply:

I have taken cognizance of the contents of your letter of January 14, 1924. I am fully aware of the influence exercised by the wages and salaries paid by the Federal and State governments upon the entire trend of wages. Nevertheless I do not consider it possible to set up as a general principle that the salaries and wages paid by private industries shall not be allowed to exceed those paid to public employees. Leaving the cost of living out of consideration, wages and salaries will in the first place always be governed by the special conditions and possibilities of the individual branches of industry and trade. Just at the present time when, according to your statements, the remuneration of public employees must be kept at an undesirably low level, it would be exceedingly unfair to hold down schematically to such a low wage and salary level the employees of those branches of industry in which the necessity for so doing does not exist. Such a holding down of wages and salaries to any greater extent than the situation of the industrial branches of industry urgently requires I consider undesirable, inasmuch as it is necessary that the purchasing power be increased as much as possible so as to bring about revival of business. It should moreover be kept in mind that the wage level of such an important group as the public employees will on account of its effect upon the fixing of prices, also influence the wage level of private employees. This wage level of public employees is, however, merely one factor to be considered in wage negotiations in addition to a number of other important factors. I am inclined to assume that you will also consider justified a diversity of wages in so far as they are conditioned on actually different circumstances such as the financial situation of the employer. Another fact that should not be left out of consideration in fixing wage rates is that civil service employees are granted certain social advantages that are not as a rule granted to private employees.

In any case I must consider it absolutely out of the question to make use of the extraordinary powers conferred upon the Government by law to prescribe limits to the conciliation boards for the wage rates proposed by them in awards. It is just in the freedom and independence of their objective attitude that I perceive the great significance of the conciliation boards and the strongest root of their authority. According to my view it is the task of the conciliation boards not to enforce a standard of wages considered desirable by the Government but to aid the interested parties in the regulation by collective agreement of their working conditions, said regulation to be undertaken by the parties themselves and on their own responsibility. That in doing so the conciliation boards shall aim to bring about a rational regulation and one in the interest of the public is of course understood. You must, moreover, be aware that awards are made by a vote of the members of the board, and it is not clear to me how the members could be made to vote in accordance with your proposal.

In view of these facts I shall now as before aim at a uniform wage policy which considers the interests of the whole commonwealth and shall furnish to the conciliation boards the material required for a correct judging of the general economic situation. I consider it, however, incompatible with the freedom of collective bargaining and the nature of our conciliation system to bind the conciliation boards by a sort of restrictive law.

The publicity given to the tactics of the Ministry of Finance has thus resulted in giving the Minister of Labor an opportunity of voicing his disapproval of the wage policy proposed by the former

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and of protesting against the imputation of overstraining the present dictatorial powers of the Government.

Not fully satisfied with the disavowal of the Government's wage policy by the Minister of Labor, the General Federation of German Trade-Unions adopted a resolution on January 23, 1924, in which it requested the federal chancellor to publish a disavowal by the Federal Government as a whole of the policy proposed by the Minister of Finance.

Wage Rates and Hours of Labor in Germany, January, 1924 ^a

Wage Rates

ACCORDING to the German Federal Statistical Office the average money wage rates per week of skilled workers in Germany fell from 28.81 rentenmarks ^b in December, 1923, to 2.767 enternmarks in January, 1924, or 3.64 per cent. Those of unskilled workers fell from 24.27 rentenmarks to 23.05 rentenmarks or 5.03 per cent. Since, however, the average national cost-of-living index experienced a drop of 8.25 per cent during January, 1924, the real wages of skilled workers, in spite of the decrease in money wages, increased 5.01 per cent and the real wages of unskilled workers 3.53 per cent. The real wages of skilled workers in January, 1924, were equivalent to 73.6 per cent and those of unskilled workers to 88 per cent of the pre-war rates. A noteworthy fact is that the difference between the average wage rates of skilled and of unskilled workers, which in pre-war times amounted to 44 per cent and which during the first quarter of 1923 had fallen to 8 per cent, had again risen to 18.8 per cent in December, 1923, and to 20.4 per cent in January, 1924.

In the following table are shown the money and real wage rates of skilled and unskilled workers in January, 1924:

AVERAGE MONEY AND REAL WAGE RATES PER WEEK IN VARIOUS OCCUPATIONAL GROUPS IN GERMANY, JANUARY, 1924

Occupational group	Skilled workers			Unskilled workers		
	Money wages ¹	Real wages ²		Money wages ¹	Real wages ²	
		Amount	Per cent of 1913 rate		Amount	Per cent of 1913 rate
	<i>Rentenmarks</i>	<i>Rentenmarks</i>		<i>Rentenmarks</i>	<i>Rentenmarks</i>	
Mine workers.....	² 33.84	³ 31.38	83.4	⁴ 28.50	⁴ 26.46	106.5
Building trades.....	26.66	24.74	66.0	23.58	21.88	74.8
Woodworkers.....	25.62	23.77	75.6	22.20	20.60	90.4
Metal workers.....	27.35	25.38	70.1	22.21	20.61	84.3
Textile workers, male.....	20.69	19.20	73.3	17.62	16.35	76.5
Textile workers, female.....	14.59	13.54	77.8	11.84	10.99	76.4
Factory workers.....	25.92	24.05	72.9	23.04	21.38	79.9
Printing trades.....	25.80	23.90	72.8	21.93	20.31	85.8
Manual workers in Government establishments.....	24.00	22.23	64.3	18.72	17.34	73.2
Weighted average for all groups:						
January, 1924.....	27.76	25.76	73.6	23.05	21.39	88.0
December, 1923.....	28.81	24.53	70.1	24.37	20.66	85.0

¹ Weighted average of the collectively-agreed-upon wage rates in force in January in the main centers of the individual industry group, inclusive of family allowances (wherever granted) for wife and two children.

² Computed on the basis of the average national cost-of-living index for the month.

³ Workers below ground (working 8-hour shifts in the Ruhr district, Lower Silesia and Saxony and 8½-hour shifts in Upper Silesia).

⁴ Workers above ground (working 10-hour shifts in the Ruhr district and Upper Silesia and 9-hour shifts in Saxony).

^a Germany, Reichswirtschaftsamt, Statistisches Reichsamt. Wirtschaft und Statistik, Berlin, Feb. 27, 1924, pp. 118, 119.

^b The rentenmark circulates only within Germany, at a value equal to the gold mark, or 23.8 cents.

The table preceding shows that of the occupational groups covered, mine workers received the highest money and real wages. In the case of unskilled mine workers (workers above ground) the January, 1924, real wage rate was even higher than the pre-war rate. The metal workers received the next highest wages, the building trades, factory, printing, and wood trades workers following in the order named. The lowest rates were paid to manual workers in Government establishments and to textile workers.

It should be noted, however, that not even one-half of the organized German workers received the full benefit of the increase in real wages in January, 1924, for, according to trade-union returns, 52.2 per cent of the organized workers were either totally unemployed during that month or were working short time.

Hours of Labor

IN PURSUANCE of the decree of December 21, 1923,^c the daily hours of labor in industrial establishments may by collective agreement be extended beyond the legal 8 hours and up to 10 hours per day, and collective agreements providing for shorter hours of labor than those permissible under this decree may be terminated on 30 days' notice. In most instances existing collective agreements providing for an 8-hour or shorter working-day have been terminated and in the new agreements concluded in their place the weekly hours of labor have as a rule been fixed at 54 or 60.

The following table shows for those industries in which new collective agreements have been concluded the hours of labor worked per shift or week at the beginning of 1924 as compared with 1913 and the end of 1923, and also at what hour of work extra pay for overtime begins (1924):

HOURS OF LABOR IN VARIOUS INDUSTRIES IN GERMANY, 1913, 1923, AND 1924

Industry and locality	Maximum hours of labor			Hour of work at which overtime pay begins, 1924
	1913	End of 1923	Beginning of 1924	
Mining:	<i>Per shift</i>	<i>Per shift</i>	<i>Per shift</i>	<i>Daily</i>
Ruhr district, below ground	¹ 8.0	7	8	9
Ruhr district, above ground	¹ 10.8	8	10	11
Upper Silesia, below ground	¹ 9.6	7½	8½	9
Upper Silesia, above ground	¹ 11.1	8	10	11
Lower Silesia, below ground	¹ 8.0	7	8	9
Lower Silesia, above ground	¹ 10.9	8	8	9
Metal industry:	<i>Per week</i>	<i>Per week</i>	<i>Per week</i>	<i>Weekly</i>
Northwestern group	54-60	48	57½	58
Berlin	54-60	48	² 54-60	61
Hamburg	54	48	54	56
Breslau	54-60	48	² 54-60	55
Stuttgart	54-56	46	² 54-60	55
Magdeburg	54-60	48	56	57
Mannheim	54-56	46	² 54-60	61
Hagen	54-60	48	57	58
Textile industry:				
Augsburg	52-58	46	² 51-54	55
Barmen	56-58	46	54	55
Rheine	53-58	46	² 51-54	55
Leipzig	53-59	46	² 53-56	49
Forst	55-60	46	² 51-54	52
Printing trades:				
Compositors, hand	52-53	48	53	54
Compositors, machine	52-53	48	51	52

¹ Weighted average.

² The lowest number of hours shown must be worked on order of the employer; the highest number must be worked if the works council has given its consent.

^c See MONTHLY LABOR REVIEW, March, 1924, pp. 85-87.

Referendum on the Eight-Hour Day in Switzerland ¹

A LAW amending the law of June 27, 1919, which established the 48-hour week in Switzerland, was submitted to the vote of the Swiss people for ratification or rejection on February 17. The law of 1919 had been amended in July, 1922, to permit the extension of the working week to 54 hours in times of serious economic crises affecting the country generally, or for particular industries when other circumstances justified it, if authorized by the Federal Council after consultation with central employers' and workers' federations.

In Switzerland if 30,000 citizens demand that a law passed by the Federal Government be submitted to a popular vote, the Government is obliged to proceed to a referendum. More than 80 per cent of the electorate took part in the voting and the law increasing the length of the workday was rejected by a considerable majority, 430,000 votes being cast against it and 312,000 for it.

¹ L'Information Sociale, Paris, Feb. 21, 1924, p. 3; La Journée Industrielle, Paris, Feb. 19, 1924, p. 1.

WOMAN AND CHILD LABOR

Trend of Child Labor in 34 Cities in the United States, 1922 to 1923^a

OF 34 cities furnishing the Children's Bureau with statistics of employment certificate issuance in 1923, 30 reported an increase in the number of children under 16 years of age entering regular employment for the first time during the calendar year 1923 as compared with 1922. In these 34 cities the number of 14 and 15 year old children receiving first regular employment certificates was 75,752 in 1922 and 89,813 in 1923.

In 15 of the cities reporting there was an increase of at least 20 per cent in 1923 as compared with 1922; in 7 (Birmingham, Louisville, Manchester, Mobile, Pittsburgh, Waterbury, and Yonkers) the increase was 50 per cent or more.

The accompanying table gives the numbers of certificates issued and the per cent of increase or decrease in the individual cities.

These figures supplement statistics previously published by the Children's Bureau in "Trend of child labor in the United States, 1913 to 1920" (MONTHLY LABOR REVIEW for April, 1921, pp. 1-14) and "Trend of child labor in the United States, 1920 to 1923" (MONTHLY LABOR REVIEW for September, 1923, pp. 101-105). The latter report gave statistics through June, 1923.

NUMBER OF CHILDREN BETWEEN 14 AND 16 YEARS OF AGE RECEIVING REGULAR EMPLOYMENT CERTIFICATES FOR THE FIRST TIME, 1922 AND 1923, AND PER CENT OF INCREASE OR DECREASE AS COMPARED WITH PRECEDING YEAR, BY STATE AND CITY¹

State and city	1922	Per cent of increase or decrease as compared with 1921	1923	Per cent of increase or decrease as compared with 1922
Alabama:				
Birmingham.....	139	-16.3	240	+72.7
Huntsville.....	189	-25.0	208	+10.1
Mobile.....	78	-53.0	128	+64.1
Montgomery.....	90	+13.9	93	+3.3
California:				
San Francisco.....	295	-4.8	381	+29.2
Connecticut:				
Bridgeport.....	806	-7.5	1,032	+28.0
New Haven.....	856	+49.7	1,235	+44.3
Waterbury.....	308	+177.5	703	+128.2
Delaware:				
Wilmington.....	423	+147.4	430	+1.7
District of Columbia (Washington).....	693	-27.7	474	-31.6
Indiana:				
Indianapolis.....	607	-9.7	725	+19.4
Kentucky:				
Louisville.....	351	+88.7	795	+126.5
Louisiana:				
New Orleans.....	² 2,042	-2.3	2,489	+21.9
Maryland:				
Baltimore.....	3,199	+27.8	4,145	+29.6

¹ Compiled, except where otherwise noted, from figures furnished by certificating officers, school officials, etc., in correspondence with the U. S. Children's Bureau.

² Reports of the factories' inspection department of the parish of Orleans for the year ending Dec. 31, 1921, p. 5; 1922, p. 1.

^a Prepared in the industrial division of the Children's Bureau, U. S. Department of Labor.

NUMBER OF CHILDREN BETWEEN 14 AND 16 YEARS OF AGE RECEIVING REGULAR EMPLOYMENT CERTIFICATES FOR THE FIRST TIME, 1922 AND 1923, AND PER CENT OF INCREASE OR DECREASE AS COMPARED WITH PRECEDING YEAR, BY STATE AND CITY—Concluded

State and city	1922	Per cent of increase or decrease as compared with 1921	1923	Per cent of increase or decrease as compared with 1922
Massachusetts: ³				
Boston.....	2,390	-4.0	2,810	+17.6
Fall River.....	1,574	+74.1	1,578	+0.3
New Bedford.....	⁴ 1,378	+40.3	1,439	+4.4
Somerville.....	313	-13.5	366	+16.9
Springfield.....	565	+328.0	639	+13.1
Worcester.....	904	+159.0	1,077	+19.1
Michigan:				
Detroit.....	288	+9.1	277	-3.8
Minnesota:				
Minneapolis.....	339	-16.7	301	-11.2
St. Paul.....	218	+5.5	207	-5.0
Missouri:				
St. Louis.....	4,468	+15.6	4,978	+11.4
New Hampshire:				
Manchester.....	159	-36.7	346	+117.6
New Jersey:				
Jersey City.....	1,570	+38.2	1,944	+23.8
Newark.....	2,404	+47.2	2,509	+4.4
Trenton.....	791	+55.7	974	+23.1
New York:				
New York City.....	32,492	-16.4	36,518	+12.4
Yonkers.....	401	-4.1	814	+103.0
Pennsylvania:				
Philadelphia.....	9,124	+37.9	10,937	+19.9
Pittsburgh.....	1,659	+35.2	2,778	+67.5
Rhode Island:				
Providence.....	⁵ 2,083	+32.9	2,463	+18.2
Wisconsin:				
Milwaukee.....	2,556	+8.4	3,780	+47.9

³ Figures for Massachusetts cities do not include "home permits."

⁴ Annual report of the school committee of the city of New Bedford for the years 1921, p. 17; 1922, p. 18; 1923, p. 18.

⁵ Annual reports of the agent of the school committee, 1921 and 1922

Work of Children on New Jersey Truck Farms

THE United States Children's Bureau has recently published a report upon child labor on the truck farms of New Jersey, based upon a study which covered the year ending August 31, 1921.¹ This report forms the third of a series, the two earlier numbers of which, relating to conditions in Virginia and Maryland, have been noted in previous issues of this magazine. (See MONTHLY LABOR REVIEW, December, 1923, p. 118; April, 1924, pp. 103, 104.) The study was restricted to three counties, Cumberland, Gloucester, and Burlington, which were selected as being among the leading truck regions of the State. Efforts were made to secure full information concerning every child under 16, whether resident or belonging to the families of migratory workers, who had been employed in farm work in these counties for as much as 12 days during the year under consideration. A total of 994 such children was found, of whom 549 were migratory, while 445 were children of resident farmers, farm tenants, or laborers. The children were practically all white, and to a large extent of foreign parentage, Italians being the most numerously represented.

¹ U. S. Children's Bureau. Work of children on truck and small-fruit farms in southern New Jersey. Washington, 1924. 58 pp.

Children were employed, to some extent, at every kind of farm work, but naturally they were found more extensively in the lighter operations, such as gathering berries or dropping seed or seedling plants into drills at the proper intervals, than in the heavy work of plowing, harrowing, and the like. Nevertheless, the heavy work was sometimes assigned to children who seemed far too young for it. Loading, driving or hauling, and shocking, are about the only forms of work listed in which children under 10 had not been engaged. The resident children had been employed for a greater variety of work than the children of migratory families, who had been utilized mainly for picking and harvesting.

In general, the objectionable conditions found here were similar to those in Maryland and Virginia. Often the work was no more than the child might well do, with advantage to himself as well as to the family, but as there were no safeguards against abuses children might be, and in some cases were, put to work unduly early, set to tasks too heavy for their years, and kept at work for overlong hours or under conditions detrimental to health. Above all, their school work suffered from absence caused by farm work. As to age and length of working-day, the following summary is given:

About three-fourths, both of the local and of the migratory workers, were under 14 years of age; 43 per cent of the former and 47 per cent of the latter were under 12; and one-fifth of those in each group were under 10. A notable proportion—27 per cent—of the local children reporting on the length of their working-day worked more than 8 hours a day, including 23 per cent of the children working on home farms and 34 per cent of the others. Of the migratory workers, also, 41 per cent of those reporting worked more than 8 hours a day.

As to the effect upon school work, it was found that the need for their services on the farm was the leading cause of irregular attendance among the 377 resident children for whom the facts were obtained.

A large majority of the 377 children had lost from several days to four months on account of farm work. Two-thirds of those living on farms and one-half of those going out to the farms to work by the day who reported concerning absences from school had been absent on account of their work in the fields. Absences from all causes resulted in almost one-third of the children's attending school less than 70 per cent, and half less than 80 per cent, of the term.

The children of migratory families, most of whom came from Philadelphia for the truck work, were even more seriously affected. One-half of those whose school records could be obtained had lost 8 or more weeks from school, and 29 per cent had lost at least 12 weeks through their migrations. "The average absence for farm work among these children was 43 days."

The school law of New Jersey, it is pointed out, does not exempt children from attendance in order that they may work on farms, but the enforcement of the law is in the hands of local officials, who are reluctant to prosecute neighbors for infractions of the law which do not conflict with the general sentiment of the community. The case of the migratory children presents even greater difficulties, since as soon as they leave Philadelphia they are out of the jurisdiction of the school authorities there, while they do not stay in the rural community sufficiently long for the local authorities to assume the responsibility of seeing that they attend school. It is suggested that inasmuch as these workers cross State boundaries, "Federal action may be found to be necessary in dealing with the problem."

Hours and Earnings of Women in Five New York Industries¹

THE New York Department of Labor has recently issued a study, prepared by the Bureau of Women in Industry, on the hours and earnings of women employed in mercantile establishments and in the manufacture of confectionery, paper boxes, shirts and collars, and tobacco. The study is based upon the pay-roll records of 359 factories employing 30,237 women, and of 208 mercantile establishments employing 28,823 women. The pay-roll material used covered for each establishment for a single week falling in the period between February 15 and April 15, 1923.

Earnings of mercantile employees who worked less than half time were eliminated, as it was felt that these employees might represent a supplementary force working only afternoons or on certain days in the week. Where the reports included bonuses or commissions, these were added to the weekly earnings. The tabulation for factories excluded the office employees; for mercantile establishments, where a distinction between this group and the selling force is difficult, all occupations were included. No girl under 16 years of age was included in the study.

The scheduled hours of the establishments ranged from less than 44 to 54 a week. The percentage distribution, according to scheduled hours, of the total group of women studied, was as follows:

	Per cent.
44 hours and under.....	5.6
45 and 46 hours.....	19.3
47 and 48 hours.....	30.9
49 and 50 hours.....	25.8
51 and 52 hours.....	7.9
53 and 54 hours.....	9.0
Hours not reported.....	1.5
Total.....	100.0

Under the New York law a 54-hour week is permissible for women working in factories and mercantile establishments, but it appears from this table that comparatively few employers take advantage of the permission. One-fourth of the women studied had scheduled hours of 46 and under per week, over one-half had from 47 up to and including 50, and less than one-tenth had a week of 53 or 54 hours. In this respect there was a decided difference between the mercantile and factory establishments, only 4.9 per cent of the women in the former as against 12.9 per cent of those in the latter having scheduled weeks of 53 or 54 hours.

The 44-hour week had not made much headway in any of the industries with the exception of the tobacco, and shirt and collar industries. In New York City one-quarter of the tobacco employees and about one-third of those in the shirt and collar industry had scheduled hours of 44 or less. Up-State, 22 per cent of the tobacco employees, but none of those in the shirt and collar industry had these shorter scheduled hours.

A study of undertime, overtime, and full-time employment showed considerable differences between the industries; 82.9 per cent of the women in mercantile establishments worked the full scheduled week, while in the factory industries only 37.9 per cent had full-time employment. The proportions working full time varied in the factory industries, ranging from 31.1 per cent in the manufacture of shirts and collars to 50.7 per cent in the manufacture of paper boxes.

¹New York. Department of Labor. Special Bul. No. 101: Hours and earnings of women in five industries, etc. Albany, 1923. 116 pp.

The proportion who had worked the full weekly hours in the week studied varied considerably in the different hour groups.

In considering this variation the question inevitably arises: At which length of weekly hours are women best enabled to work the required schedule? There is not absolute uniformity in the separate industries on this point, but the preponderance of evidence shows that a greater proportion of employees worked full time in establishments with scheduled hours of 48 or under than in establishments with a longer scheduled week.

Both in New York City and up-State the amount of full time was found to be greater in the shorter-hour plants of every industry but the confectionery and the tobacco; and in the tobacco industry up-State the proportion of full time was greater in shorter-hour establishments, though this tendency was not found in New York City.

Earnings varied according to industry and locality but in the main were decidedly low. The median weekly earnings of all the women in the four factory industries were \$15.25, the median varying according to location from \$14.25 in the up-State factories to \$16.25 in New York City. For those who worked full time the median was \$16.25, the median varying from \$18.25 in New York City to \$15.25 elsewhere. For the mercantile industry the median weekly earnings of all the women studied were \$16.25, the median for New York City being \$17.25, and for outside establishments, \$12.25. For those who worked full time the median earnings were \$16.25, being \$18.25 in New York City and \$12.75 elsewhere.

In New York State in 1923 more than one-quarter of the women in the four factory industries and almost one-fifth of those in the mercantile industry earned less than \$12; approximately half the women—57 per cent in the four factory industries and 49 per cent in the mercantile establishments—earned less than \$16; \$25 or more were the earnings of 7 per cent of the factory, and 13 per cent of the mercantile employees.

A comparison of the earnings of those who had worked the full scheduled week brought out the fact that there was a tendency toward a higher rate of pay in the shorter-hour establishments.

In New York City in four out of the five industries, earnings were as high for employees working a full week of 44 to 48 hours as for employees working a full week of 49 to 54 hours. For three of these industries earnings of women in the shorter-hour plants were actually higher than in the long-hour plants. Mercantile, shirts and collars, and tobacco were the industries which showed higher earnings in shorter-hour plants while confectionery was the industry which had earnings as high in the short as in the long hour plants. In the paper-box industry, the only New York City industry where full-time median earnings increased with the longer scheduled hours, it was the earnings of employees working 49 or 50 hours which brought up the rates; the median earnings of those working 51 to 54 hours being lower than the earnings of workers with scheduled hours of 48 or less.

It has already been pointed out that a larger per cent of employees had an opportunity to receive full-time earnings in short-hour establishments than in plants with a longer weekly schedule; it is now significant to learn of the decided tendency toward a higher rate of pay for full-time work in shorter-hour establishments.

Women and Children in Pennsylvania Industries

THE Consumers' League of Eastern Pennsylvania has recently published a study¹ of the changes in the occupational distribution of female workers aged 10 years and over in Pennsyl-

¹ Consumers' League of Eastern Pennsylvania. Working women and children in Pennsylvania: An analysis of the occupational and manufacturing sections of the 14th United States Census, by Grace Pugh. Philadelphia, 1923, 34 pp.

vania, as shown by a comparison of the census of 1920 with that of 1910. The number of such workers gainfully employed had risen in 1920 to 686,232, which was 20.7 per cent of the total age group, and more by 80,796 than the number so employed in 1910. The proportion which women formed of all gainfully employed workers had risen slightly, from 19.3 per cent in 1910 to 20.1 per cent in 1920, but this had not been uniform throughout the industries. Agriculture, manufacturing and mechanical industries, public service, and domestic and personal service, all showed a slight falling off in the proportion which women formed of their workers; agriculture and domestic and personal service showed a marked decrease in the number of women employed, while in the other industries named an increase in number had been coincident with the decrease in proportion. In 1920, manufacturing and mechanical industries employed the largest number of women, 222,935; domestic and personal service came next with 168,852, followed by clerical occupations with 122,457, professional service with 74,390, and trade with 68,197.

The most important changes of the decade seem to have taken place in the two groups, domestic and personal service, and clerical occupations.

Domestic and personal service is the only occupational group in which women predominate, and, at the same time, the only occupational group which women are rapidly leaving. The 209,953 women engaged in domestic and personal service in 1910 fell to 162,852 in 1920.

The greatest decrease comes in the servant class. In 1910 there were 127,106 women servants and 89,302 in 1920. Men are not leaving this work as rapidly as women. In 1910 there were 15,884 men servants and in 1920 14,454. The number of laundresses, both in and out of laundries, has also decreased materially.

Clerical occupations, it is declared, are in Pennsylvania rapidly becoming women's jobs. The number of women so engaged rose from 50,819 in 1910 to 122,457 in 1920, an increase of 141 per cent, while for men the gain during the decade was only 35 per cent. The women showed the greatest increases in the group of stenographers and typists, where their number rose from 21,252 to 46,270, and among "clerks, except in stores," where the increase was from 10,224 to 44,105.

Turning from the Federal census to the State census of manufactures, in which children under 16 are grouped separately from adults, the report traces the changes in their employment since 1899.

The most marked characteristic of the distribution of the wage earners in a 20-year period is the decrease in the number of children under 16 years of age employed in manufactures. * * * But 1904 marks the turning point. The actual numbers of child workers began to decrease. The child labor act of 1905, raising the age of permissible employment from 13 to 14 years, was chiefly responsible. The act of 1909, limiting the employment of males under 16 and females under 18 to 10 hours a day and 58 hours a week, and the act of 1915, further limiting the hours to 9 a day and 51 a week and providing continuation school training for minors between 14 and 16, both served to decrease to a greater extent the employment of children. And by 1919 the proportion of 4.5 per cent children in Pennsylvania industry in 1904 was reduced to 1.7 per cent. In absolute numbers the decrease in children employed was from 34,451 in 1904 to 19,032 in 1919, approximately a 45 per cent reduction.

This decline in the extent of child labor, it is pointed out, has been accompanied by an increase in the employment of women, the deduction being made "that girls of 16 and over began to take the jobs formerly held by children under 16."

PRODUCTIVITY OF LABOR

Production and Output in Belgian Coal Mines in 1923

THE Revue du Travail, Brussels, of January, 1924 (pp. 30-32), publishes data concerning the operation and output of Belgian coal mines during 1923. The following table shows the production, number of employees, the average number of days worked, and the average daily output of miners for each month in 1923.

PRODUCTION, DAYS OF OPERATION, NUMBER OF EMPLOYEES, AND AVERAGE DAILY OUTPUT PER WORKER IN BELGIAN COAL MINES IN 1921 AND 1922 (MONTHLY AVERAGE), AND IN 1923, BY MONTHS

[Production and output per worker have been converted to tons of 2,000 pounds]

Period	Total production (tons)	Average number of days of operation	Number of days worked	Average number of workers (underground and surface)	Output (tons) per worker per day		
					At the seam	Underground (including workers at the seam)	Underground and surface
1921: Monthly average.....	2, 001, 296	24	3, 942, 692	162, 840	3. 60	0. 74	0. 51
1922: Monthly average.....	1, 950, 535	24	3, 805, 461	153, 003	3. 69	. 76	. 51
1923							
January.....	2, 198, 240	26	4, 101, 190	155, 908	3. 80	. 78	. 54
February.....	1, 768, 508	20	3, 357, 710	155, 995	3. 90	. 78	. 53
March.....	2, 120, 946	25	3, 974, 770	155, 095	3. 86	. 79	. 53
April.....	2, 008, 214	24	3, 727, 100	154, 616	3. 89	. 79	. 54
May.....	1, 998, 999	24	3, 801, 190	154, 879	3. 85	. 78	. 53
June.....	2, 171, 156	26	4, 046, 330	153, 733	3. 90	. 77	. 54
July.....	2, 046, 497	25	3, 926, 550	154, 745	3. 88	. 77	. 52
August.....	2, 124, 121	25	3, 992, 130	156, 410	3. 85	. 78	. 53
September.....	2, 086, 158	25	4, 030, 540	160, 048	3. 91	. 76	. 52
October.....	2, 301, 206	26	4, 340, 900	166, 011	3. 84	. 75	. 53
November.....	2, 302, 495	25	4, 358, 800	173, 596	3. 86	. 76	. 53
December.....	2, 133, 843	23	4, 142, 220	175, 910	3. 83	. 75	. 51

LABOR AGREEMENTS, AWARDS, AND DECISIONS

Decisions of the Railroad Labor Board

Right of Railway Employees to Hold Public Office

THE right of a carrier to dismiss an employee solely for the reason that such employee had become a candidate for public office and in so doing failed to secure the sanction of his employer was denied by the board in decision No. 2169, dated March 3, 1924. In this case the carrier, the Gulf, Colorado & Santa Fe Railway Co., issued the following circular setting forth rules respecting the political activities of its employees which were similar to rules issued by the United States Railroad Administration during the period of Federal control.

No employee shall—

(1) Neglect his railroad duties to engage in politics. Candidacy for nomination or election to, or the holding of political offices, is not permissible and will at once terminate service with the carrier. However, employees may become candidates for and accept election to municipal offices, such as aldermen, school or village trustees, highway commissioner, and similar offices in small communities where such action will not involve neglect of their railroad duties, but should first obtain approval from their department head. The positions of notaries public, officers of public libraries, members of park boards, and officers of religious and eleemosynary institutions are not construed as political offices.

(2) Hold a position as a member of any political committee which solicits funds for political purposes, or solicit or receive funds for political purposes, or act as a chairman of a political convention, or assume the conduct of any political campaign.

(3) Attempt to coerce or intimidate another officer or employee in the exercise of his right of suffrage. Every employee has the right to vote as he pleases and to exercise his civil rights free from interference or dictation by any fellow employee or by any superior, or by any other person.

In any cases where company officers, attorneys, and employees have been elected prior to this date to political offices, the rules laid down in this circular will not be made effective until conclusion of their present terms of office, providing that their political service does not interfere with the performance of their railroad duties. After the completion of their present terms of office, they will be governed by the provisions of this circular.

The carrier contended that it was within its rights (1) to issue instructions covering conditions under which employees may engage in politics; (2) to define the results which will follow engaging in politics; (3) that it has a right at certain times and under certain conditions to permit employees to run for office where it is the earnest wish of the employees not to further political ambition, but to render honest, efficient, and economical service to a community by so doing. The employees represented by the Railway Employees' Department of the American Federation of Labor requested that the employee in question, who had been discharged for becoming a candidate for public office, be reinstated and paid for time lost.

The board decided that the dismissal of the employee was not justified, and that he should be reinstated with his seniority rights unimpaired and be compensated for the wage loss resulting from his dismissal less any amounts earned in other employment.

The board is not unmindful of the responsibilities of management and the necessity of avoiding a curtailment of its legitimate functions. On the other hand, citizens owe certain obligations to their Government, and it should not be within the province of any man, association of men, corporation, or organization of employees, to unduly restrict or abridge the rights of citizenship. Nowhere in the evidence submitted in this case has it been shown that this employee neglected his duties or failed to satisfactorily perform his work. The board further expresses the opinion that up to a point where it can be shown that an employee's aspirations for public office result in neglect or failure to satisfactorily perform his work, it would be an unwarranted infringement upon the rights of citizenship for any carrier to promulgate and attempt to enforce rules such as those which form the basis of this dispute.

Wage Reductions—Unorganized Employees

American Railway Express Co.

DECISION No. 2226, dated March 11, 1924, sustained the request of colored porters employed by the American Railway Express Co. at Birmingham, Ala., and represented by the National Association of Railway Mechanics, Helpers, Laborers, and Freight Handlers for reimbursement for wage loss by reason of arbitrary reductions and for reinstatement with pay for time lost, less amounts earned in other employment, for those employees who refused to sign the agreement accepting the reduction.

Since the employees were unorganized when the agreement was signed, the carrier contended that the only way an agreement could be negotiated with these employees was by personal interview with individuals. It does not follow, says the board, that it was in accordance with law and justice to coerce the individual employee by threatening him with the loss of employment.

The manner in which this reduction was brought about is in violation of the transportation act, 1920, in that it is apparent that the employees were required to sign the agreement in order to retain their positions. This is decidedly an unfair method of dealing with employees and can not be approved by this board.

A case also involving reductions and discharges arose at Atlanta, Ga. Colored clerical employees employed by the American Railway Express Co. contended that they were informed by the carrier that they would have to sign an agreement to accept a reduction in pay or their services would no longer be required. The case was submitted to the board by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, the employees stating that although these colored employees are not members of the brotherhood, they became members in effect under an agreement with the American Federation of Labor, under whose laws they are chartered and organized, and that therefore the clerks' organization has a right to represent them. The carrier stated that the brotherhood has no jurisdiction over the employees in the dispute as they are unorganized, and that the agreement was the result of a conference, concurred in by the majority of employees, and was without coercion and duress.

The transportation act provides three methods by which cases may be brought before the board, namely, (1) upon application of the chief executive of any carrier or organization of employees or subordinate officials whose members are directly interested in the dispute; (2) upon a written petition signed by not less than 100 unorganized employees or subordinate officials directly interested in the dispute, or (3) upon the Labor Board's own motion, if it is of

the opinion that the dispute is likely substantially to interrupt commerce.

In this case, the board states, it is shown that the employees directly interested are not members of the complaining organization; they therefore have the other two methods of bringing their case to the board open to them. It appears, however, that these employees have an organization of their own. The board therefore decided that the employees directly interested in this dispute might amend their submission by making the organization to which they belong the party complainant, such amendment to be made within 90 days or the claim to be dismissed. "This holding of the board shall not be construed to mean that an organization or its officials may not appear as counsel before the board for employees not included within its own membership."

St. Louis & San Francisco Railway Co.

More than 100 unorganized colored employees protested against a reduction in wages alleged to have been put into effect without conference with the employees involved by the St. Louis & San Francisco Railway Co. Since 1918 these trainmen, who were performing the duties of brakemen, had been classified as brakemen and received the brakemen's rate of pay. On February 1 the carrier abolished the position of colored brakemen and reestablished the position of train porter which had existed prior to Federal control, reducing the rate of pay from \$3.33 per hundred miles to \$120 per month. The board states the facts in this case as follows:

At various times, however, certain committees and individuals claimed the right to represent these colored employees in conferences with the carrier relative to the matters here in controversy. The authority of these representatives was usually, if not always, questioned by the employees themselves or some portion of them.

The carrier in September, 1921, negotiated an agreement, effective February 11, 1921, with Sandy Eslinger, who claimed to act as general chairman. This agreement covered the disputed question of wages and confirmed the carrier's reduction. Subsequently 112 of the 145 employees concerned signed a written ratification of this agreement. Later on, they repudiated it and stated that they had signed it "through fear of violence." The carrier refutes the idea that any such threats of violence were made on its behalf.

It thus appears that those employees acting as unorganized employees ratified the action of the carrier in writing, just as they appear before the board as unorganized employees and in writing repudiate their action.

In this connection, it must be noted that these colored employees, even though they be brakemen as they claim, are not eligible to membership in the Brotherhood of Railroad Trainmen, the brakemen's organization. Having no organization of their own on this carrier's property, they seem to have adopted the method of signing individually written authorizations, agreements, etc. The carrier could not well avoid dealing with them in accordance with the only method which they themselves had offered to practice.

Under these conditions, having entered into an agreement with the carrier by the method of their own choice and practice, although an irregular and unsatisfactory one, it would not be conducive to good faith and the furthering of justice to sanction by a decision in this case their repudiation of said agreement.

The request of the employees in so far as it affects rates of pay prior to the date of the decision was denied, but the board is to hold this case on its calendar, treating it as an application for a reclassification and for the rates of pay for brakemen; the "board will investigate the nature of the duties performed by these employees with a view to determining whether they are brakemen and entitled to be paid accordingly."

Work-Train Crews

THE Railroad Labor Board has decided that engine and train crews must be made up of employees in the service of the carrier, although the trains are operated by a construction company. In this case the carrier—The St. Louis-San Francisco Railway Co.—employed a construction company to do the work of filling in a bridge on its main line of railway. The work was done by work trains, the engines and equipment of which were furnished by the construction company. The trains were manned by engineers, firemen, and brakemen furnished by the construction company, at rates of pay less than those demanded by the contracts between the carrier and its train service employees. The carrier furnished conductors for the trains, who also acted as pilots for foreign employees. The train service brotherhoods, including the Order of Railway Conductors, Brotherhood of Railroad Trainmen, Brotherhood of Locomotive Engineers, and Brotherhood of Locomotive Firemen and Enginemen, protested to the carrier that the construction company furnishing outside employees to handle these trains constituted a violation of the contract, inasmuch as the trains were being operated over the tracks of the carrier, and the work was originating and being disposed of on a seniority district covered by contract between the brotherhoods and the carrier. The carrier contended it had the right to contract work of the character involved in any manner that would secure the most economical results, that the work was of an extraordinary character not considered in the agreements with the employees, and that the work in no way set aside the contracts with the employees.

In the opinion of the board, set forth in Decision No. 2144, dated February 26, 1924, as the great majority of carriers man their engines and trains with their own employees under such circumstances, by the terms of the contract the work properly belonged to the employees of the carrier, and that such of the employees of the carrier as were deprived of the work should be paid for time lost by them at the rates named in their agreement.

Dismissal From Service of Women Who Marry

THE Brotherhood of Railway and Steamship Clerks requested the reinstatement in the employ of the Chicago & Eastern Illinois Railway Co. of a woman dismissed in accordance with an office regulation requiring women who get married to leave the service. The employees contended that this woman had sufficient seniority over other employees in the office to justify her continuance in the service; that the rule requiring married women to resign was in conflict with the rules of the clerks' agreement, and that the action of the carrier was improper and in violation of the agreement. The carrier stated that before her marriage this woman asked whether or not she would be permitted to retain her position in case she married. She was advised that no exception to the office rule would be made in her case. Upon her marriage she was notified that her services would no longer be required. The carrier contended that it was entirely within its rights in dismissing her; that she made no protest when she was dismissed other than to ask for a letter stating the cause of her dismissal; that no hearing was requested; and that her failure to comply with the rules relative to grievances automatically disposed of the case.

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The majority of the board decided that, under the circumstances in this particular case, the action of the carrier in dismissing this woman from the service when she married was neither just nor reasonable and that she should be reinstated with seniority rights unimpaired and paid for all time lost since the date of her dismissal, less any amount earned in other employment.

The dissenting opinion was based on the ground that no provision is to be found in the transportation act on which the Railroad Labor Board "can firmly plant its assumption to dictate the policy of the management of a carrier," and for the secondary reason that the decision penalizes the carrier for an unusual and unreasonable delay over which it had no control—the dispute had its origin October 9, 1920, and the decision was rendered February 28, 1924.

Representation

WHETHER representation of shop crafts in their negotiations with employers shall be on the basis of the majority of all crafts, or whether representation should be determined by each craft, is the subject of Decision No. 2143 of the board, dated February 25, 1924. The evidence submitted in this dispute shows that representatives of the System Federation No. 66, affiliated with the Railway Employees' Department of the American Federation of Labor, requested certain changes in the then existing agreement with the Minneapolis, St. Paul & Sault Ste. Marie Railway Co. The carrier took the position that the System Federation was not authorized to represent the shop employees on that road. This contention was sustained by Decision No. 1836 of the board. Subsequent to that decision it was agreed that the question of representation should be submitted to the shop craft employees for vote. An election held on December 10, 1923, showed a majority of machinists and blacksmiths favored representation by the System Federation, a majority of the boiler makers, sheet-metal workers, electricians, and car men voting for representation by the Soo Line Shop Employees' Association, with a total of 1,281 votes for the System Federation and 1,616 votes for the company organization. After the election, representatives of machinists and blacksmiths requested that the carrier negotiate rules and working conditions governing those particular crafts. The carrier refused on the ground that the majority of the shop employees favored representation by the company association.

Principle 15 (Exhibit B) of Decision No. 119 of the board provides that "the majority of any craft or class of employees shall have the right to determine what organization shall represent members of such craft or class." Decision No. 218 of the board definitely decided that representation should be determined by each craft. Representation has never been determined on the basis of the majority of all crafts. The board therefore upheld the contention of the machinists and blacksmiths. Representatives of the railroads on the board dissented from the majority decision.

Contract Work

A NEW phase of the question of contract work is presented in a decision (No. 2207) handed down by the board on March 7.

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than a year ago. This contract provides for the stabilization of employment, by utilizing the facilities of the railroad company to

The carrier involved in this case, the Missouri-Kansas-Texas Lines, entered into a contract with the city of Clinton, Mo., wherein it was agreed that the carrier would pay to the city of Clinton the sum of \$500 a month, in consideration whereof the city would furnish such police protection and watching of the railroad crossings as was necessary to conform with the requirements of the city ordinance. Crossing watchmen and flagmen at the intersection of the carrier's line of railway and the streets of Clinton whose wages and conditions of work were governed by an agreement between the Brotherhood of Maintenance of Way Employees and Railway Shop Laborers and the United States Railroad Administration and by the decisions of the Railroad Labor Board, were notified that their positions were abolished. City employees engaged to do this work were not considered subject to the rules and regulations promulgated by the board.

The carrier agreed to provide the customary houses to shelter employees of the city while engaged in their duties at said crossings, as well as to furnish all necessary lights, fuel, and such other supplies as it was customary for the carrier to furnish its own employees when engaged on such work. The carrier took the position that the work of crossing watchmen and gatemen is purely a safety measure for the convenience and interest of the general public, coming entirely within the control of the municipality in its exercise of its police power; that specific regulations governing such protection are made by ordinance; and that such a condition justifies the placing of the entire matter in their hands. The employees took the position that protection for the public against injury at railway crossings is a duty imposed upon the carrier by the public through State and municipal laws, and that the work of crossing watchmen is as essential to the operation of the railways as numerous other operations performed by railway employees for the protection of the interest of the public. They argued further that the question of contract involved herein is no different than other questions of contract which have come before the board.

The board decided that the contract was in violation of the transportation act in so far as it was construed to remove the employees involved from the application of the act, and that the provisions of the contract affecting wages and working rules of such employees were in violation of the decisions of the board. The crossing watchmen and flagmen of the contractor (the city of Clinton) are therefore under the jurisdiction of the board and subject to the transportation act and the decisions of the board. The carrier was directed to take up with any employee the matter of reinstatement upon the application of the interested employee or his representative.

Railroads

Cooperation in the Baltimore & Ohio Railroad Shops

AN agreement recently reached by System Federation No. 30, representing the railway shop unions, and the Baltimore & Ohio Railroad operates to extend to other shops of this carrier the cooperative arrangement which has been on trial at the Glenwood shops of the railroad since the close of the shopmen's strike more

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than a year ago. This contract provides for the stabilization of employment, by utilizing the facilities of the railroad company to the fullest possible extent for the maintenance, rebuilding, and remodeling of locomotives and car equipment, as well as for the manufacture of supplies and material needed for mechanical and other purposes. It recognizes the possibilities of constructive cooperation by the employees in matters of shop operation, output, etc., and implies the equitable sharing between shopmen and the railroad of the benefits of cooperation.

The plan provides for local joint committees at 45 designated points on the railroad and for a joint system cooperative committee. The function of these committees is the discussion of questions relating to planning and carrying on the work, the specific purpose being mutual helpfulness and not criticism and faultfinding. The local joint committees, known as joint local cooperative committees, are organized to represent both car and locomotive departments. A local joint committee is composed of the local federated or shop crafts union committee and a like number of local supervising officers who are designated by the mechanical officer in charge at the point. The local ranking mechanical officer is the chairman of the joint committee, and he designates as the management's members of this committee, among others, the local storekeeper and a representative of the shop practices bureau. Meetings of these committees are held biweekly on Wednesday afternoons, during work hours. The first meeting at each point was called for March 5, 1924. Minutes of the meetings are kept and furnished for use of employees and management. No formal procedure is outlined for these local committees in the agreement, but the following subjects which might profitably be discussed and considered at these meetings are suggested: Cooperation between departments; proper storage and care of materials; distribution of material and fuel; tool equipment and distribution of hand tools; grouping of machine tools; machine operation and crane service; scheduling work through shops; classification and handling of freight and passenger car repairs; method of making repairs; method of handling and disposition of scrap; inspection of scrap and reclamation of usable material; conditions of shops and shop grounds.

These meetings are not for the purpose of discussing grievances. Adequate facilities for the immediate adjustment of grievances are provided elsewhere.

In addition to the local cooperative committees there is provided a joint system cooperative committee, composed of the staff of the chief of motive power and equipment of the Baltimore & Ohio Railroad and the executive board of System Federation No. 30. Meetings of the committee are to be held every three months on the first Tuesday of the month. The purpose of the meetings of this committee will be to review and advise upon the recommendations of the several local joint cooperative committees, and to develop more intensive cooperation. Subjects discussed by the committee will be more general in nature and will have to do with shop, yard, and roundhouse operation, such as material supply, care, and saving, methods of doing work, coordinating, scheduling, and routing of work, tools and tool equipment, job analysis, quality of work, group records of work turned out, general shop performance, etc.

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The System Federation interprets the agreement and suggests local methods of carrying it out in its circular No. 38, issued on February 27, which follows in part:

Steady work is to be realized by doing "Baltimore & Ohio work in Baltimore & Ohio shops," the extension of Baltimore & Ohio repair and manufacturing facilities, the creation of maintenance reserve as soon as economically possible and the inauguration of such other measures as time and future experience will indicate as being wise and necessary. Management has agreed to develop a program step by step along the foregoing lines, especially in so far as cooperation results in lowered repair and manufacturing costs, thereby enabling management to do work in Baltimore & Ohio shops in preference to purchasing materials and equipment from outside concerns.

Fair sharing of the gains of cooperation will, as far as the shopmen are concerned, be realized through improvement in working conditions and wage income from time to time, as established by negotiations with management, based among other things on actual showing made through cooperation.

Proposals, ideas, suggestions, etc., by local shopmen for consideration at the joint local cooperative conferences, will naturally come to life through our daily observations in and around our jobs, benches, machines, departments and shops. Such ideas, suggestions and proposals on the part of our members should be referred to their local craft committee for handling. In this connection we would suggest that the local shop committee of each craft get together occasionally at noon time or some other time convenient to all concerned in order to acquaint themselves with various matters and suggestions referred to them by our local member for submission to the next local joint cooperative committee meeting. We suggest further, when each craft holds its local lodge meeting, that individual members bring their ideas for bettering things, jobs, output, conditions, etc., to the lodge room for consideration, discussion, and subsequent reference by the lodge to the proper craft committeeman for handling at the next cooperative meeting, providing, of course, the ideas receive the indorsement of the lodge. In general, the same procedure should be followed in getting important matters considered by the joint cooperative committee which we now follow in the handling of grievances. Whenever the subject advanced by anyone is important enough the lodge might well discuss it at its next meeting, so that your representative at the joint meeting will have the full benefit of your experience and judgment. In short the regular union channels should be used at all times in getting matters before the joint meetings for consideration. Depending upon the importance of the proposal, the local craft committee may refer it directly to the joint meeting through the local craft representative, or the local committee may first refer it to the next lodge meeting and even perhaps the local shop federation meeting for discussion and action. By following this procedure the ideas of everyone will get fair and adequate consideration.

It is not the intention to utilize these joint local cooperative meetings for the adjustment of grievances. Grievances, when they arise, should be adjusted immediately and not allowed to hold over. Furthermore the mixing up of disputes or matters growing out of the violation of our agreement or working rules with the consideration of measures intended to help improve the shop and its operation will tend to confuse the purpose of these cooperative meetings, will delay consideration of our grievances, and in general will lessen the usefulness and opportunity of the joint cooperative meetings. So to the end that we shall not only continue but extend the functions of our organizations it is, above all else, desirable that we distinguish clearly between our various activities as such, especially first, in respect to the cooperative function of the local federated committee, and, second, in respect to the orderly handling of grievances.

It is further suggested that at points where advisory board members are located it will be desirable to have them sit in on the original organizing meeting, in order that the local committee may have the benefit of their advice. In case of misunderstandings in carrying out the program above outlined, the secretary of the System Federation is to be advised, and arrangements will be made to have one of the general chairmen attend one of the biweekly cooperative meetings at the point where difficulty is experienced. It is further planned that the consulting engineer employed by the federation will make

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occasional trips over the system, visiting various points where meetings are in progress, and help out in such ways as may suggest themselves from time to time.

In conclusion we simply want to emphasize that this cooperative program has been inaugurated at the shopcraft organizations' own suggestion and is now being extended at our suggestion. As a result of the development of this program, organized labor, especially the standard shop craft unions on the Baltimore & Ohio Railroad, assumes a new and much more important rôle in the American railroad industry. We are making history. We union shop men on the Baltimore & Ohio are the first ones to apply the principles of American labor's new industrial platform, "Industry's manifest duty," as adopted by the American Federation of Labor last October at Portland. We suggest that every one become thoroughly familiar with this platform. It is the foundation upon which our cooperative program rests. We confidently feel, all our assurances are, and straight reasoning indicates, as cooperation develops and our crafts become more thoroughly and completely organized, that those benefits to which we as American railroad men are entitled, namely, steadier work, better working conditions, and a higher standard of living, will be more rapidly forthcoming than ever in the past.

Wage Increases—Train-Service Employees

SUBSEQUENT to the concerted wage movement inaugurated by the four railroad train service brotherhoods last fall, conferences between the eastern carriers and the brotherhoods have resulted in increases on a number of the larger roads. The brotherhoods demanded the restoration of the 1920 peak scale made effective by decision No. 2 of the Railroad Labor Board. This would have meant an increase of approximately 12½ per cent. The compromise settlement on the New York Central, which provided for an increase of approximately 5 per cent, effective January 16, has served as a precedent, and similar settlements providing increases of from 5 to 6 per cent for some or all of the brotherhoods have been reached on the Pennsylvania, the Baltimore & Ohio, the Delaware, Lackawanna & Western, the Pittsburgh & West Virginia, the Southern Railway Lines, the Long Island, the Lehigh Valley, and other lines. Conferences are now in progress on the western roads.

Southern Railway Pact

THE agreement between the Southern Railway Lines and the Brotherhood of Railway Trainmen, and the Order of Railway Conductors provides for wage increases of approximately 5 per cent for the three years, March 1, 1924, to March 1, 1927; for a minimum standard rate of pay for each day that service is performed for regularly assigned passenger trainmen; and for a bonus whereby employees may by increasing productivity participate in savings due to reduction in operating expenses in their particular classes.

The new rates of pay effective for 1924 are as follows:

Passenger service

Rates for trainmen on trains propelled by steam or other motive power:

Class	Per mile	Per day	Per month
Conductors.....	\$0. 0447	\$6. 70	\$201. 00
Baggagemen handling express.....	¹ . 0347	5. 20	156. 00
Baggagemen.....	. 0324	4. 80	145. 90
Flagmen and brakemen.....	. 0313	4. 70	141. 00

¹ Rates specified for "Baggagemen handling express" apply to baggagemen in the employ of the railroads who shall be paid exclusively by the railroads.

Freight service

(a) For service paid the through freight rates under schedule now in effect the rates shall be as follows:

Class	Per mile	Per day
Conductors.....	\$0.0616	\$6.16
Flagmen and brakemen.....	.0484	4.84

(b) For service paid the local or way freight rates under schedule now in effect the rates shall be as follows:

Class	Per mile	Per day
Conductors.....	\$0.0668	\$6.68
Flagmen and brakemen.....	.0524	5.24

(c) The same money increases shall apply to milk, mixed, and miscellaneous train service as are applied to the service in which they are now classified. Where there is a separate rate for milk, mixed or miscellaneous classes of service, it shall be increased in the same amount as is applied to the service in which now classified.

Straight helper service

Class	Per mile	Per day
Conductors.....	\$0.0702	\$7.02
Flagmen and brakemen.....	.0535	5.35

Helper switcher service

Class	Per mile	Per day
Conductors.....	\$0.0714	\$7.14
Flagmen and brakemen.....	.0539	5.39

Yard service

Class	Per day
Foremen.....	\$6.64
Helpers.....	6.16
Switchtenders.....	4.72

The provision for a standard rate of pay reads:

When the monthly earnings of regularly assigned passenger trainmen from daily guarantees, mileage, overtime, and other rules do not produce the following average amounts per day, they will be paid for each day service is performed:

	Per day
Conductors.....	\$7.00
Baggage-express.....	5.50
Baggagemen.....	5.16
Brakemen and flagmen.....	5.00

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The bonus provision is based on the extent to which engine and train service employees show a reduction of expenses in handling trains as compared with total gross revenue. The 1923 ratio of expense in this service to the gross revenue, which was 21.42 per cent, is known as the test ratio and is to be the standard of measurement for efficiency. The following accounts are included: Yard enginemen; fuel for yard locomotives; other supplies for yard locomotives; train enginemen; train motormen; fuel for train locomotives; other supplies for train locomotives; yard conductors and brakemen; yard switch and signal tenders; yard supplies and expenses; trainmen; train supplies and expenses—other train expenses; clearing wrecks; damage to live stock on right of way; loss and damage—freight; loss and damage—baggage; injuries to persons.

In February, 1925, the ratio will be ascertained for 1924 in the same manner, and if, notwithstanding the 1924 increases in compensation of engine and train service employees the ratio of operating expenses to gross revenue for 1924 is not in excess of the test ratio, the management agrees in the month of February, 1926, to pay to each employee party to the agreement as a bonus, $1\frac{1}{2}$ per cent of his total compensation for the year 1925. In the event operating expenses on the above accounts increase during 1924, such excess is to be deducted from the $1\frac{1}{2}$ per cent bonus, but in no case will it wipe out more than the bonus payment. In 1926, the same method is to be followed, the bonus for 1926 being 3 per cent based on 1925 operation and payable in February, 1927. These bonus rates are maxima, the per cent up to these maximums to be arrived at on the basis illustrated in the agreement as follows:

Test ratio, 21.42 per cent; ratio 1924, 21.31 per cent—ratio has not increased; therefore, bonus payment maximum of 1.5 per cent of 1925 compensation.

Test ratio, 21.42 per cent; ratio 1924, 21.67 per cent—ratio has increased 0.25 per cent; therefore, maximum bonus decreased 0.25 per cent and bonus payment would be 1.25 per cent of 1925 compensation.

Test ratio, 21.42 per cent; ratio 1924, 22.96 per cent—ratio has increased 1.54 per cent; therefore, maximum bonus entirely wiped out and no bonus payment on 1925 compensation.

Test ratio, 21.42 per cent; ratio 1925, 21.36 per cent—ratio has not increased over test ratio; therefore, bonus payment maximum of 3 per cent of 1926 compensation.

Test ratio, 21.42 per cent; ratio 1925, 21.72 per cent—ratio has increased 0.30 per cent; therefore, maximum bonus decreased 0.30 per cent and bonus payment would be 2.70 per cent of 1926 compensation.

Test ratio, 21.42 per cent; ratio 1925, 24.42 per cent—ratio has increased 3 per cent; therefore, maximum bonus entirely wiped out and no bonus payment on 1926 compensation.

A similar agreement has been concluded with the firemen and hostlers.

Clothing Industry—Chicago

Division of Work

CASE No. 9 before the board of arbitration in the Chicago men's clothing industry, referred by the trade board and decided on December 22, 1923, involved an interpretation of the division-of-work clause of the agreement. The firm involved in the dispute posted a notice to the effect that its trimming room would work only

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five days a week, and six hours instead of eight hours a day. The union insisted that the firm had divided the work heretofore by laying off the men in rotation, and that it had no right to change this established practice. The firm argued that work in the trimming room was slack and that under the division-of-work clause of the agreement it was within its rights in making the change.

Previous decisions of the board on this issue had implied that any system of division of work previously used by a firm, whether short time, or lay-off, or any other, might be continued without question, and that change of system is not prohibited, but it should not be done without consultation with the union.

On the merits of its request for a change from the method of rotating lay-offs to the method of working a short week and short days, the firm argued that it needed the change because the old system was too costly and inefficient and resulted in unequal division of work. The union contended that the short-time method imposed a hardship on the men. "They can not get other work as they might under the lay-off system, and they feel it an injustice to be required to come down town and pay car fare for less than a day's work." When men are laid off in rotation, the firm charged, one set of men often has to leave work unfinished, and the new set of men must waste time in checking over the unfinished work, thus making it impossible to hold the men to the standards of production fixed for the work. The union denies this charge and contends that while a few moments may be lost in checking, no appreciable increase in cost can result.

The board decided that the firm may work short weeks while it has not full-time work.

This method insures to the men a more equal division of work than the lay off method, and no one can be favored or discriminated against in the matter of the amount of work he gets. The only reasonable objection that a worker can have to this method is that it might prevent him from taking another job, as he is not likely to get anything for only part of a week. This objection, however, is not very serious, for any person who is given work for only part of a week would have a right to a leave of absence if he could get full-time work, elsewhere.

The firm may not work short days, however, but must rotate lay offs, if the short week alone is not sufficient.

The board can not find the same justification of reasonableness in the system of working short days. If a man is to lose eight hours a week, obviously it would be better to get a whole day for himself rather than to lose an hour or two each day during the week. Since the men object to this method, the board is of the opinion that this system of dividing work should not be imposed on them unless it can not be avoided.

The trimmers' commission is directed to hold men who are rotating lay-offs responsible for standards on unfinished and partly finished jobs to the fullest extent possible.

Whether appreciable losses occur under the system of lay-offs because some men have to finish other men's jobs is a question of fact that the board has not investigated. If, as the union contends, there is no appreciable loss, then there is no justification for forcing men to work short days instead of taking lay offs. If, however, considerable losses occur, then the men have no right to insist that such losses must be borne by the firm in order to suit their convenience. The board of arbitration can see no reason why costs should increase on account of unfinished jobs, and the union seems to be of the same opinion when it argues that costs do not increase appreciably on this account. If the costs fixed by the standards of production can be maintained with the system of rotary lay-offs, then there is no reason for working short days.

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Elevator Operators—Chicago

ON NOVEMBER 1, 1923, an agreement governing hours, wages, and working conditions was entered into by the Building Managers' Association of Chicago and Elevator Operators' and Starters' Union, Local 66 of the International Union of Elevator Constructors. The minimum wage for operators of freight elevators is to be \$120 a month, and for those operating passenger elevators, \$122.50 per month if the building is under nine stories in height and \$130 if it is nine stories or over. For each class there is to be an increase of \$5 a month at the end of three months' service, and another of the same amount at the end of six months. Elevator starters are to receive \$10 a month more than elevator operators. One rather unusual provision is included: "It is mutually agreed and understood that all wage rates shall be the same for male and female employees doing the same class of work."

The day is to consist of $8\frac{1}{2}$ hours actual labor, worked within $9\frac{1}{2}$ hours. Week-day overtime, up to 10 hours a day, is to be worked at straight-time rates, and anything above this is to be paid at time and a half. Sunday and holiday work is to be paid for at the rate of time and a half, except in the case of night operators, who are to be paid straight-time rates. Employers must furnish uniforms where these are required, and the union members pledge themselves on their part to take good care of the uniforms and not to wear them except when at work. Strikes and lockouts are barred, and disputes which can not be settled directly by the association and the union are to be referred to a board of arbitration, whose decision shall be final and binding. The agreement is to be in effect till October 31, 1925.

Printing

Press Assistants (Feeders)—Washington, D. C.

QUESTIONS in dispute between the Washington Press Assistants' (Feeders) Union, No. 42, and the Closed Shop of the Typothetae of Washington, D. C., were submitted to arbitration before Chief Justice C. J. Smyth. The Closed Shop contended (1) that cylinder press assistants' (feeders) wages and platen press assistants' (feeders) wages be reduced 5 per cent from the existing scale of \$30 and \$19, respectively; (2) that question of hours be made arbitrable; (3) that holiday work be at the rate of time and one-half; (4) that overtime work for the day force be at the rate of time and one-half up to 12 p. m. The union contended (1) for increases of \$6 per week; (2) that in case of emergency transfer to a position carrying a higher scale, the employee receive the higher scale, and in case of transfer to a lower-paid position the scale for his regular job be paid; (3) that single-roll web presses, 46 inches or over, shall require the services of two journeyman cylinder press assistants (feeders); (4) that in case two or more Kelly presses, or such other makes of automatic cylinder presses in operation, an assistant (feeder) shall be employed; (5) that apprentice cylinder press assistants (feeders) shall be taken from the Platen Press Assistants' (Feeders) Union; (6) that cylinder assistants (feeders) on two-color presses and U. P. M. presses be allowed a differential of \$1 per week; and (7) that night forces shall

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receive \$2.50 per week above the regular day scale, on the basis of 5 nights per week of 44 hours.

The decision of Judge Smyth, which was to become effective on and after the first pay-roll week following March 22, 1924, granted an increase of \$3 per week to both cylinder and platen feeders. The employers' second proposition for arbitrability of hours was granted. Contentions 3 and 4 were denied. The union's second proposition was denied. "This proposition, it seems to me, lacks mutuality, and I am of the opinion that the employee so assigned should receive the same pay in the assigned position as in his regular position." Proposition 3 was likewise denied. The arbitrator says, "I am of the opinion that two assistants are needed only when two rolls are running." Contention 4 was also denied. As to this proposition, the arbitrator says: "I am not satisfied from the testimony and arguments submitted that such an assistant is necessary; * * * his employment, I think, would involve an unnecessary expense on the part of the employer." The fifth proposition was denied so far as its being compulsory, but was declared permissible "whenever, in the judgment of the employer, it may be done without detriment to his or its business." A 50-cent per week differential was granted cylinder assistants (feeders) on two-colored presses and U. P. M. presses (proposition No. 6). The existing differential of \$2 for night forces was maintained.

Printing Pressmen—Washington, D. C.

DIFFERENCES between Printing Pressmen's Union No. 1 and the Closed Shop Division of the Typothetae of Washington, D. C., were submitted to Mr. Justice William Hitz, arbitrator. Following are the principal contentions of the union and their disposition by the arbitrator:

- (1) An increase of \$11.50 per week for job pressmen, making scale \$40. [Increase of \$1.50 over basic scale granted.]
- (2) Increase of \$12 per week for cylinder pressmen, operating presses under 65 inches, making scale \$50. [Increase of \$2 granted.]
- (3) Increase of \$14.75 per week for cylinder pressmen operating perfecting or rotary presses, making scale \$57.50. [Increase of \$2.25 granted.]
- (4) Increase of \$17.25 per week for cylinder pressmen operating three-color or offset presses, making scale \$60. [Increase of \$2.25 granted.]
- (5) Increase of \$17.85 per week for cylinder pressmen operating U. P. M. or web presses, making scale \$63. [Increase of \$2.32 granted.]

[NOTE.—The above increases restore the 1921 scale.]

- (6) That pressmen operating a press with numbering heads shall receive \$1 per day more than scale for operating a like press. [Not granted.]
- (7) That pressmen in charge of two automatic-fed presses shall receive \$1 per day more than the scale for hand-fed presses. [Not granted.]
- (8) That pressmen operating a press with color attachment shall receive \$1 per day more than scale for operating a like press not herein provided for. [Not granted.]
- (9) That pressmen in charge of web presses or presses wherein two or more journeymen are employed shall receive \$1 per day additional. [Not granted.]
- (10) That temporary employment of not less than one week shall be paid \$1 a day additional. [Not granted.]
- (11) That night work be paid 20 per cent over day rates. [15 per cent granted.]
- (12) That intermediate shift be paid 10 per cent over night rates. [Not granted.]
- (13) That night work week not exceed 41½ hours. [Not granted—44-hour night week to continue.]
- (14) That all overtime be double price. [Not granted—price and one-half granted. Saturday afternoon, which was double price, is now price and one-half.]

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(15) That all presses where the impression is obtained by contact between a cylinder and flat surface, regardless of size or variety, shall be classified as cylinder presses. [Not granted—Vertical Miehle is classified as job or platen press.]

(16) That pressmen employed temporarily and working less than a week shall receive not less than \$1 per day more than that of journeymen. [Not granted.]

(17) That an apprentice shall not start, run, or stop a press or operate a press during the first two years of his apprenticeship. [Not granted.]

(18) That the number of journeymen on a three-color automatic or offset press shall consist of a man in charge and one journeyman. Web press, single unit, three journeymen. [Not granted.]

(19) That the Typothetae shall provide individual towels and a Red Cross first-aid chest. [Granted.]

(20) That the arbitrator's decision be retroactive as of May 1, 1923. [Not granted—new scale goes into effect on first day of the first pay roll week following January 17, 1924.]

This contract embodying this decision will remain in effect until April 30, 1925.

Photo-Engravers

New York

NEW York Photo-Engraver's Union No. 1, for its members engaged in commercial work, concluded a two-year agreement effective January 1, 1924, with the Photo-Engravers Board of Trade of New York (Inc.), providing a minimum for day journeymen of \$53 per 44-hour week for 1924 and of \$55 for 1925, night journeymen to receive a minimum of \$58 per 40-hour week during 1924 and \$60 per week during 1925. This is a weekly increase of \$3 over the previous minimum, which had remained stationary for three years. Actual wages are not increased, however, says the American Photo-Engraver (Feb., 1924).

The union's agreement with the employing gravure printers of New York City provides for a minimum weekly rate of \$53 for day work and \$58 for night work for 1924, for photo-engravers, retouchers, etchers, engravers, proofers, and cylinder depositors and grinders, and a minimum of \$47 for day work and \$52 for night work for cylinder grinders, to be increased to \$51 and \$56, respectively, commencing July 1, 1924. This scale is generally similar to the one now in effect in photo-engraving establishments. A new minimum scale of \$55 and \$60 per week will apply to all branches after January 1, 1925.

Philadelphia

By an agreement between Photo-Engraver's Union No. 7, of Philadelphia, whose members are employed in commercial work, and the Manufacturing Photo-Engravers Association of Philadelphia, to take effect January 2, 1924, journeyman members of the union received an increase of \$2 per week. The minimum scale is \$50 per week.

Law on Collective Agreements in Finland ¹

A LAW governing collective agreements in Finland was promulgated March 21, 1924, and becomes effective January 1, 1925. In this law a collective agreement is defined as a written agreement entered into by one or more employers or registered associations of employers with one or more registered unions of workers regarding the terms governing labor contracts or working conditions. The law, however, does not apply to the so-called inde-

¹ Finland. Socialministeriet. Social Tidskrift, No. 12, Helsingfors, 1923, pp. 729-732, and No. 3, 1924.

finite (*obestämda*) or unlimited (*obegränsade*) collective agreements, in which a temporary group or association constitutes the employee party.

A collective agreement may be terminated at any time upon three months' notice—if the agreement is not for a fixed period; after the expiration of four years, if the agreement is for more than four years; after the specified period, if the contract is for less than four years, or if notice of termination is not given within the period specified. Notice of termination of agreements must be in writing.

A party to the agreement is anyone who either makes the agreement or afterwards assents to it, such as registered associations of employers and of workers and private employers, and also the successor in business of an employer who was a party to it. Those bound by the agreement are the employers and the associations concluding the agreement or who afterwards, with the consent of the original parties to the agreement, assent in writing to the agreement, and employers and employees who are, or who were during the period the agreement was effective, members of an association which signed it. Any labor contracts made by these employers and employees must conform to the provisions of the collective agreement unless either of the parties is bound by previous collective agreements or the agreement itself does not limit its scope.

The rights and obligations of an employer under the collective agreement pass to his successor in business. Employers bound by a collective agreement may not conclude a labor contract with workers not covered by the collective agreement on terms which conflict with it. The law specifies that where there is conflict between any provisions of a labor contract and the collective agreement, the provisions of the latter are to control.

Unless the agreement specifies otherwise, a fine (*plikt*) is to be imposed for noncompliance with the provisions of the agreement, the maximum being 5,000 marks² for a violation by the employer and 500 marks for one by the worker. Successive fines may be imposed if the noncompliance continues.

The parties to the agreement, and their members in case of associations, are bound not to obstruct the carrying out of the agreement as a whole or any particular provision thereof. For a violation of this provision a fine (*plikt*) not to exceed 100,000 marks is to be imposed, unless the agreement specifies otherwise. In case of property damage, this fine goes to the injured party; otherwise it goes to the party bringing suit. The law also provides that a collective agreement may be terminated immediately when its provisions have been violated to such an extent that the other parties to it can not be expected to continue under it.

All disputes regarding the collective agreement are to be settled by the proper courts, unless specified in the agreement or agreed by the parties that they shall be settled by arbitration.

A copy of the collective agreement must be deposited with the Ministry of Social Affairs within two weeks after the agreement is concluded, and another copy posted in the establishments covered. Notice of the withdrawal of any or all of the parties to the agreement or of the termination of the agreement or any part thereof must also be sent to the Ministry of Social Affairs.

² Finnish mark at par = 19.3 cents. Exchange rate varies.

EMPLOYMENT AND UNEMPLOYMENT

Employment in Selected Industries in March, 1924

EMPLOYMENT in manufacturing industries in the United States increased 0.2 per cent in March, while pay-roll totals decreased 0.3 per cent and per capita earnings decreased 0.4 per cent. These unweighted figures are based on reports received by the Bureau of Labor Statistics from 8,320 establishments in 52 manufacturing industries covering 2,735,069 employees whose total earnings during one week in March were \$73,299,024. The same establishments in February reported 2,730,133 employees and total pay rolls of \$73,505,800.

Comparing reports for March and February, from identical establishments, increases in employment are shown in 27 of the 52 industries and increases in earnings in 30 industries.

The fertilizer industry was the one industry showing large gains in both employment (25.8 per cent) and earnings (23.9 per cent), these increases being due to the spring season. Other seasonal increases in employment were 8.4 per cent in the carriage industry and 7.5 per cent in the brick and tile industry. The pottery, glass, stamped ware, ice cream, steam fittings, and iron and steel industries also made fair gains in employment, ranging from 2 to 4 per cent.

Increases in pay-roll totals also occurred in all of the industries noted above as well as in various other industries, although in the main they were smaller than the increases in employment.

The rubber boot and shoe, slaughtering and meat packing, men's clothing, cotton goods, and structural ironwork industries all show a decrease both in number of employees and in earnings, the greatest decrease in employment being 6.7 per cent in the rubber-boot industry and the greatest decrease in pay-roll total being 7.5 per cent in the cotton-goods industry.

Six of the 12 groups of industries gained in employment and 6 also gained in total earnings, although in 2 instances the groups were not identical.

The largest gain in employment among the groups was made in the stone, clay, and glass group (4.3 per cent). The iron and steel group and vehicle group both gained 1.1 per cent. The greatest loss in number of employees (2.4 per cent) was in the food group of industries. The textile group decreased 1.6 per cent in employment and 3.7 per cent in total earnings.

For convenient reference the latest figures available relating to all employees on Class I railroads, excluding executives and officials, drawn from Interstate Commerce reports, are given at the foot of the first and second tables.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN FEBRUARY AND MARCH, 1924

Industry	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		February, 1924	March, 1924		February, 1924	March, 1924	
Food and kindred products	909	181,578	177,261	-2.4	\$4,509,810	\$4,411,989	-2.2
Slaughtering and meat packing	82	88,923	84,971	-4.4	2,167,042	2,071,711	-4.4
Confectionery	124	16,808	16,845	+0.2	312,915	315,529	+0.8
Ice cream	77	4,720	4,870	+3.2	149,320	154,921	+3.8
Flour	301	15,766	15,161	-3.8	409,068	401,988	-1.7
Baking	312	44,809	44,839	+0.1	1,145,522	1,145,990	+0.0
Sugar refining, not incl. beet sugar	13	10,552	10,575	+0.2	325,943	321,860	-1.3
Textiles and their products	1,587	551,490	542,766	-1.6	11,325,515	10,906,023	-3.7
Cotton goods	288	182,186	175,887	-3.5	3,199,514	2,959,149	-7.5
Hosiery and knit goods	225	77,565	78,507	+1.2	1,363,135	1,370,735	+0.6
Silk goods	227	55,466	55,139	-0.6	1,169,618	1,134,651	-3.0
Woolen and worsted goods	186	70,186	69,641	-0.8	1,651,152	1,589,294	-3.7
Carpets	19	20,357	20,840	+2.4	572,667	599,433	+4.7
Dyeing and finishing textiles	77	28,238	27,973	-0.9	668,000	641,915	-3.9
Clothing, men's	227	62,539	60,229	-3.7	1,576,119	1,494,435	-5.2
Shirts and collars	97	25,901	25,738	-0.6	389,227	389,994	+0.2
Clothing, women's	166	16,228	16,276	+0.3	452,883	448,170	-1.0
Millinery and lace goods	75	12,824	12,536	-2.2	283,200	278,247	-1.7
Iron and steel and their products	1,433	583,213	589,705	+1.1	17,422,221	17,792,768	+2.1
Iron and steel	216	276,986	283,879	+2.5	8,638,140	8,829,924	+2.2
Structural ironwork	149	18,851	18,374	-2.5	525,059	511,955	-2.5
Foundry and machine-shop products	626	174,520	173,948	-0.3	5,041,578	5,072,901	+0.6
Hardware	39	29,866	29,279	-2.0	731,857	743,164	+1.5
Machine tools	183	24,720	24,747	+0.1	718,186	720,924	+0.4
Steam fittings and steam and hot-water heating apparatus	133	40,849	42,061	+3.0	1,257,443	1,313,695	+4.5
Stoves	87	17,421	17,417	-0.0	509,958	530,205	+4.0
Lumber and its remanufactures	1,005	195,007	194,585	-0.2	4,269,063	4,294,040	+0.6
Lumber, sawmills	434	111,730	110,852	-0.8	2,294,508	2,314,245	+0.9
Lumber, millwork	231	30,866	31,265	+1.3	747,609	766,443	+2.5
Furniture	340	52,411	52,468	+0.1	1,226,946	1,213,352	-1.1
Leather and its finished products	339	120,200	120,379	+0.1	2,820,142	2,792,494	-1.0
Leather	129	27,374	27,114	-0.9	707,807	694,197	-1.9
Boots and shoes	210	92,826	93,265	+0.5	2,112,335	2,098,297	-0.7
Paper and printing	769	142,738	142,628	-0.1	4,413,820	4,441,917	+0.6
Paper and pulp	173	50,535	50,214	-0.6	1,356,315	1,357,534	+0.1
Paper boxes	152	15,806	15,894	+0.6	328,866	338,373	+2.9
Printing, book and job	245	32,939	32,928	-0.0	1,091,110	1,089,820	-0.1
Printing, newspapers	199	43,458	43,592	+0.3	1,637,529	1,656,190	+1.1
Chemicals and allied products	256	73,373	75,601	+3.0	2,123,302	2,206,079	+3.9
Chemicals	89	18,722	18,524	-1.1	491,371	495,513	+0.8
Fertilizers	115	9,321	11,729	+25.8	164,672	204,062	+23.9
Petroleum refining	52	45,350	45,348	-0.0	1,467,259	1,506,504	+2.7
Stone, clay, and glass products	600	98,482	102,669	+4.3	2,628,953	2,720,758	+3.5
Cement	73	23,476	23,837	+1.5	663,695	679,159	+2.3
Brick and tile	336	25,277	27,181	+7.5	649,691	692,764	+6.6
Pottery	53	12,696	13,203	+4.0	355,571	366,526	+3.1
Glass	138	37,033	38,448	+3.8	959,996	982,309	+2.3
Metal products, other than iron and steel	46	15,189	15,720	+3.5	374,091	391,381	+4.6
Stamped and enameled ware	46	15,189	15,720	+3.5	374,091	391,381	+4.6
Tobacco manufactures	212	40,711	40,135	-1.4	736,415	730,685	-0.8
Tobacco: Chewing and smoking	34	8,036	7,908	-1.6	135,008	131,071	-2.9
Tobacco: Cigars and cigarettes	178	32,675	32,227	-1.4	601,407	599,614	-0.3
Vehicles for land transportation	779	500,729	506,234	+1.1	16,394,499	16,215,345	-1.1
Automobiles	220	332,199	338,565	+1.9	11,532,332	11,359,611	-1.5
Car building and repairing, electric-railroad	189	17,153	17,023	-0.8	508,407	509,361	+0.2
Car building and repairing, steam-railroad	326	148,477	147,501	-0.7	4,283,992	4,273,505	-0.2
Carriages and wagons	44	2,900	3,145	+8.4	69,768	72,868	+4.4
Miscellaneous industries	385	227,423	227,386	-0.0	6,487,969	6,465,535	-0.3
Agricultural implements	101	25,187	25,298	+0.4	692,958	697,034	+0.6
Electrical machinery, apparatus, and supplies	132	104,059	104,606	+0.5	2,954,319	2,964,443	+0.3
Pianos and organs	33	8,371	8,309	-0.7	242,519	239,836	-1.1
Rubber boots and shoes	8	16,658	15,538	-6.7	385,648	362,811	-5.9
Automobile tires	73	45,652	46,577	+2.0	1,417,248	1,432,449	+1.1
Shipbuilding, steel	38	27,496	27,058	-1.6	795,277	768,962	-3.3
Total	8,320	2,730,133	2,735,069	+0.2	73,505,800	73,299,024	-0.3
Railroads, Class I	Jan. 15, 1924 Feb. 15, 1924	1,733,639 1,737,029		+0.2	\$232,497,637 \$223,859,559		-3.7

¹ Less than one-tenth of 1 per cent.² Amount of pay roll for one month.

[1070]

Comparison of Employment in March, 1924, and March, 1923

REPORTS are available from 5,214 establishments in 43 industries for a comparison of employment and earnings between March, 1924, and March, 1923. These reports, from identical establishments in each year, show a decrease in 1924 of 2.1 per cent in number of employees, while pay-roll totals increased 2.4 per cent and per capita earnings increased 4.6 per cent. The total number of employees in March, 1924, was 2,040,650 and in March, 1923, 2,085,222. The total amount of the pay rolls in 1924 was \$54,918,726 and in 1923, \$53,627,309.

There were gains in the number of employees in March, 1924, in only 15 of the 43 industries and gains in the earnings of employees in 24 industries. The pottery industry in the 12-month period again made very large gains in both items, the percentages being 14.6 and 30.8, respectively. The automobile industry gained 11.8 per cent in employment and 14 per cent in the earnings of employees, while the iron and steel industry gained 8.4 per cent in employment and 16.5 per cent in earnings. Large gains in pay-roll totals were made also by the electrical machinery, sawmill, hardware, carpet, brick, baking, and millwork industries, each being over 10 per cent.

The decreases both in number of employees and their earnings in various industries were also of considerable size. The most pronounced decreases in employment being: 17.2 per cent in foundries, 16.6 per cent in automobile tire factories, 16.4 per cent in steam-railroad car building and repairing shops, 14.7 per cent in agricultural implement establishments, 13.3 per cent in steel shipbuilding yards, 11.1 per cent in millinery establishments, and 10.5 per cent each in the cotton goods and leather industries. The greatest decreases shown in pay-roll totals were: 17.4 per cent in automobile tire factories, 16.6 per cent in men's clothing shops, 14.8 per cent in car building and repairing shops, 14.3 per cent in foundries, 12.7 per cent in textile dyeing and finishing plants, 11.8 per cent in cotton goods establishments, 10.7 per cent in shoe factories, and 10.1 per cent in shirt factories.

Five of the 12 groups of industries gained employees in the 12-month interval and nine show a gain in the total earnings of employees. The stone, clay, and glass and the vehicle groups show a considerable gain in both items, while the textile and the leather groups show large losses in both items. The largest gain in employment was 3.9 per cent in the vehicle group, and the largest per cent of increase in pay-roll totals was 13.1 in the stone, clay, and glass group.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN MARCH, 1923, AND MARCH, 1924

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		March, 1923	March, 1924		March, 1923	March, 1924	
Food and kindred products	391	110,659	111,691	+0.9	\$2,603,350	\$2,612,058	+0.3
Slaughtering and meat packing	67	72,869	72,209	-0.9	1,656,361	1,761,050	+6.3
Flour	123	8,479	8,249	-2.7	213,564	225,633	+5.7
Baking	201	29,311	31,233	+6.6	739,455	825,375	+11.6
Textiles and their products	1,229	483,944	449,210	-7.2	9,726,955	9,019,431	-7.3
Cotton goods	232	159,903	143,093	-10.5	2,726,859	2,406,396	-11.8
Hosiery and knit goods	210	71,389	70,925	-0.6	1,168,691	1,187,893	+1.6
Silk goods	189	53,177	50,477	-5.1	1,081,383	1,057,669	-2.2
Woolen and worsted goods	154	60,739	56,291	-7.3	1,357,903	1,292,307	-4.8
Carpets	19	20,054	20,840	+3.9	531,121	599,433	+12.9
Dyeing and finishing textiles	31	17,520	15,943	-9.0	403,443	352,085	-12.7
Clothing, men's	164	54,189	48,835	-9.9	1,498,120	1,249,646	-16.6
Shirts and collars	80	24,894	22,524	-9.5	377,549	339,295	-10.1
Clothing, women's	98	12,194	11,497	-5.7	370,198	337,305	-8.9
Millinery and lace goods	52	9,885	8,785	-11.1	211,688	197,402	-6.7
Iron and steel and their products	633	405,457	400,173	-1.3	11,515,638	12,088,725	+5.0
Iron and steel	176	231,538	251,012	+8.4	6,643,229	7,741,231	+16.5
Foundry and machine-shop products	351	138,943	115,093	-17.2	3,982,702	3,412,490	-14.3
Hardware	28	18,641	19,253	+3.3	432,692	490,180	+13.3
Stoves	78	16,335	14,815	-9.3	456,915	442,824	-3.1
Lumber and its remanufactures	647	125,967	127,202	+1.0	2,650,220	2,884,116	+8.8
Lumber, sawmills	218	62,238	63,985	+2.8	1,178,435	1,351,763	+14.7
Lumber, millwork	177	24,000	24,451	+1.9	564,264	622,424	+10.3
Furniture	252	39,729	38,766	-2.4	907,521	909,929	+0.3
Leather and its finished products	288	119,388	109,986	-7.9	2,806,788	2,542,776	-9.4
Leather	124	29,400	26,313	-10.5	714,223	674,362	-5.6
Boots and shoes	164	89,988	83,673	-7.0	2,092,565	1,868,414	-10.7
Paper and printing	603	123,281	123,578	+0.2	3,593,815	3,810,992	+6.0
Paper and pulp	165	50,137	47,686	-4.9	1,251,050	1,290,078	+3.1
Paper boxes	142	14,752	14,957	+1.4	295,688	317,450	+7.4
Printing, book and job	126	22,658	23,322	+2.9	750,107	790,607	+5.4
Printing, newspaper	170	35,734	37,613	+5.3	1,297,070	1,412,857	+8.9
Chemicals and allied products	218	65,551	62,143	-5.2	1,789,186	1,807,170	+1.0
Chemicals	77	14,540	14,130	-2.8	351,044	376,846	+7.4
Fertilizers	104	11,334	11,121	-1.9	182,762	197,318	+8.0
Petroleum refining	37	39,677	36,892	-7.0	1,255,380	1,233,006	-1.8
Stone, clay, and glass products	335	55,440	57,218	+3.2	1,340,883	1,516,656	+13.1
Brick and tile	198	15,884	16,273	+2.4	379,966	425,966	+12.1
Pottery	44	10,197	11,682	+14.6	249,630	326,451	+30.8
Glass	93	29,359	29,263	-0.3	711,287	764,239	+7.4
Metal products, other than iron and steel	30	11,473	11,007	-4.1	264,537	279,033	+5.5
Stamped and enameled ware	30	11,473	11,007	-4.1	264,537	279,033	+5.5
Tobacco manufactures	187	33,322	31,806	-4.5	596,974	577,599	-3.2
Tobacco: Chewing and smoking	29	3,295	3,359	+1.9	48,943	53,286	+8.9
Tobacco: Cigars and cigarettes	158	30,027	28,447	-5.3	548,031	524,313	-4.3
Vehicles for land transportation	352	364,063	378,318	+3.9	11,694,455	12,418,165	+6.2
Automobiles	168	261,663	292,432	+11.8	8,689,123	9,908,519	+14.0
Carriages and wagons	38	2,744	2,562	-6.6	59,465	58,619	-1.4
Car building and repairing, steam-railroad	146	99,656	83,324	-16.4	2,875,867	2,451,027	-14.8
Miscellaneous industries	301	186,677	178,318	-4.5	5,108,578	5,164,005	+1.1
Agricultural implements	71	24,870	21,223	-14.7	637,263	594,235	-6.8
Electrical machinery, apparatus, and supplies	118	92,434	97,302	+5.3	2,408,354	2,767,831	+14.9
Pianos and organs	23	6,920	7,164	+3.5	191,713	209,536	+9.3
Automobile tires	63	46,152	38,500	-16.6	1,421,374	1,174,704	-17.4
Shipbuilding, steel	26	16,301	14,129	-13.3	449,874	417,699	-7.2
Total	5,214	2,085,292	2,040,650	-2.1	53,627,309	54,918,736	+2.4
Railroads, Class I							
Feb. 15, 1923		1,767,373			1,223,564,464		
Feb. 15, 1924		1,737,029		-1.7	1,223,859,559		+0.1

¹ Amount of pay roll for one month.

Per Capita Earnings

PER CAPITA earnings increased in March, as compared with February, in 27 of the 52 industries here considered. These increases were not large, only two being over 2.6 per cent. These two were 4 per cent in the stove industry and 3.6 per cent in the hardware industry.

The cotton-goods industry shows the largest decline in per capita earnings (4.2 per cent), followed by the carriage industry (3.7 per cent), the automobile industry (3.4 per cent), and the woolen and worsted and dyeing and finishing textiles industries with 3 per cent each.

Comparing per capita earnings in March, 1924, with those in March, 1923, increases are shown in all but 7 of the 43 industries for which data are available, the pottery industry leading with an increase of 14.1 per cent, followed by sawmills with 11.6 per cent, chemicals with 10.5 per cent, and the fertilizer industry with 10 per cent.

The greatest falling off in per capita earnings in the 12-month period was 7.5 per cent in the men's clothing industry. Other rather large declines were as follows: Four per cent each in the boot and shoe and the textile dyeing and finishing industries and 3.4 per cent in the women's clothing industry.

COMPARISON OF PER CAPITA EARNINGS: MARCH, 1924, WITH FEBRUARY, 1924, AND MARCH, 1923

Industry	Per cent of change March, 1924, compared with—		Industry	Per cent of change March, 1924, compared with—	
	February, 1924	March, 1923		February, 1924	March, 1923
Stoves.....	+4.0	+6.9	Slaughtering and meat packing.....	(1)	+7.3
Hardware.....	+3.6	+9.7	Structural ironwork.....	(1)	-----
Petroleum refining.....	+2.6	+5.6	Baking.....	(2)	+4.8
Paper boxes.....	+2.3	+5.9	Printing, book and job.....	-0.1	+2.4
Carpets.....	+2.2	+8.6	Electrical machinery, apparatus, and supplies.....	-0.2	+9.2
Flour.....	+2.2	+8.6	Iron and steel.....	-0.3	+7.5
Chemicals.....	+1.9	+10.5	Pianos and organs.....	-0.4	+5.6
Lumber, sawmills.....	+1.7	+11.6	Hosiery and knit goods.....	-0.6	+2.3
Steam fittings and steam and hot-water heating apparatus.....	+1.5	-----	Brick and tile.....	-0.8	+9.4
Lumber, millwork.....	+1.2	+8.3	Automobile tires.....	-0.9	-0.9
Stamped and enameled ware.....	+1.1	+9.9	Pottery.....	-0.9	+14.1
Tobacco: Cigars and cigarettes.....	+1.1	+1.0	Leather.....	-1.0	+5.5
Car building and repairing, electric-railroad.....	+0.9	-----	Boots and shoes, not including rubber.....	-1.1	-4.0
Foundry and machine-shop products.....	+0.9	+3.5	Furniture.....	-1.2	+2.8
Rubber boots and shoes.....	+0.9	-----	Clothing, women's.....	-1.3	-3.4
Cement.....	+0.8	-----	Glass.....	-1.4	+7.8
Printing, newspaper.....	+0.8	+3.5	Tobacco: Chewing and smoking.....	-1.4	+6.8
Shirts and collars.....	+0.8	-0.7	Clothing, men's.....	-1.5	-7.5
Paper and pulp.....	+0.7	+8.4	Fertilizers.....	-1.5	+10.0
Confectionery.....	+0.6	-----	Sugar.....	-1.5	-----
Ice cream.....	+0.5	-----	Shipbuilding, steel.....	-1.7	+7.1
Millinery and lace goods.....	+0.5	+4.9	Silk goods.....	-2.4	+3.0
Car building and repairing, steam-railroad.....	+0.4	+1.9	Dyeing and finishing textiles.....	-3.0	-4.1
Machine tools.....	+0.3	-----	Woolen and worsted goods.....	-3.0	+2.7
Agricultural implements.....	+0.1	+9.3	Automobiles.....	-3.4	+2.0
			Carriages and wagons.....	-3.7	+5.6
			Cotton goods.....	-4.2	-1.3

¹ Increase less than one-tenth of 1 per cent.

² No change.

[1073]

Time and Capacity Operation

THE establishments furnishing volume of employment information were asked for the first time in the March questionnaires to report time and capacity operation in terms of percentages. Some 5,000 establishments out of 8,320 complied with this request, and the data so furnished appear in the following table. Seventy-four per cent of 4,993 establishments were operating on a full-time schedule and 23 per cent were operating on a part-time schedule; 50 per cent were operating with a full force of employees and 48 per cent with a part force only; and 3 per cent of the establishments were idle. The combined reports show that the 4,993 establishments were operating 94 per cent of full time and 82 per cent of full capacity.

It will be observed that a distinction is drawn between full time and full capacity. It is understood in this connection that when an establishment is operating at full capacity a full normal force of wage earners is being employed. Full capacity as here used, therefore, applies not to output directly but rather to number of employees. For example, an establishment may reduce its output by working full time at half capacity or half time at full capacity during that period.

Industries in the textile group in March were working an average of 92 per cent of full time and 82 per cent of full capacity; industries in the iron and steel group, 95 per cent of full time and 75 per cent of full capacity; while industries in the vehicles group were working 97 per cent of full time and 89 per cent of full capacity.

FULL AND PART TIME AND FULL AND PART CAPACITY OPERATION IN MANUFACTURING ESTABLISHMENTS IN MARCH, 1924

Industry	Establishments reporting		Per cent of establishments operating		Average per cent of full time operated in establishments operating	Per cent of establishments operating		Average per cent of full capacity operated in establishments operating
	Total number	Per cent idle	Full time	Part time		Full capacity	Part capacity	
Food and kindred products	564	2	60	37	87	41	57	77
Slaughtering and meat packing.....	40		83	18	97	70	30	92
Confectionery.....	59	2	66	32	94	36	61	76
Ice cream.....	37	3	81	16	95	46	51	66
Flour.....	234	4	27	69	72	30	66	71
Baking.....	188	1	89	10	98	48	51	83
Sugar refining, not incl. beet sugar.....	6	17	83		100	50	33	86
Textiles and their products	902	2	73	25	92	48	50	82
Cotton goods.....	194	2	64	34	88	59	39	88
Hosiery and knit goods.....	115	1	72	27	94	46	53	81
Silk goods.....	126	3	78	19	95	30	67	75
Woolen and worsted goods.....	150	1	80	19	94	50	49	82
Carpets.....	9		67	33	89	44	56	82
Dyeing and finishing textiles.....	52		56	44	90	21	79	72
Clothing, men's.....	114		72	28	92	53	47	79
Shirts and collars.....	48	2	83	15	94	65	33	90
Clothing, women's.....	58	5	90	5	99	55	40	88
Millinery and lace goods.....	36	3	75	22	91	42	55	76
Iron and steel and their products	690	2	78	19	95	36	62	75
Iron and steel.....	141	10	63	27	92	40	50	81
Structural ironwork.....	89		85	15	97	33	67	72
Foundry and machine-shop products.....	392	1	79	20	95	34	65	74
Hardware.....	23		74	26	96	61	39	89
Machine tools.....	115	2	89	9	98	21	77	61
Steam fittings and steam and hot-water heating apparatus.....	80		90	10	98	49	51	85
Stoves.....	50	2	62	36	91	50	48	78
Lumber and its remanufactures	625	2	78	20	96	62	36	90
Lumber, sawmills.....	287	2	76	22	94	71	27	93
Lumber, millwork.....	134	4	81	16	97	60	36	89
Furniture.....	204	1	79	20	97	51	48	88

[1074]

FULL AND PART TIME AND FULL AND PART CAPACITY OPERATION IN MANUFACTURING ESTABLISHMENTS IN MARCH, 1924—Concluded

Industry	Establishments reporting		Per cent of establishments operating		Average per cent of full time operated in establishments operating	Per cent of establishments operating		Average per cent of full capacity operated in establishments operating
	Total number	Per cent idle	Full time	Part time		Full capacity	Part capacity	
Leather and its finished products	183	2	75	23	93	44	54	77
Leather.....	65	3	88	9	98	38	58	73
Boots and shoes.....	118	1	68	31	90	47	52	80
Paper and printing	430	2	87	12	98	66	32	91
Paper and pulp.....	107	7	82	11	97	65	28	93
Paper boxes.....	78	-----	71	29	94	54	46	85
Printing, book and job.....	143	-----	92	8	99	57	43	88
Printing, newspaper.....	102	-----	97	3	99	89	11	98
Chemicals and allied products	136	2	79	18	94	52	46	72
Chemicals.....	44	5	66	30	93	34	61	4
Fertilizers.....	60	2	78	20	92	45	53	79
Petroleum refining.....	32	-----	100	-----	100	91	9	97
Stone, clay, and glass products	439	12	66	22	91	49	39	82
Cement.....	63	8	84	8	96	62	30	89
Brick and tile.....	235	17	55	28	88	45	38	83
Pottery.....	43	-----	79	21	98	63	37	71
Glass.....	98	9	72	18	93	44	47	79
Metal products other than iron and steel	27	-----	81	19	96	30	70	76
Stamped and enameled ware.....	27	-----	81	19	96	30	70	76
Tobacco manufactures	110	6	55	39	87	37	56	71
Tobacco: Chewing and smoking.....	21	5	71	24	95	19	76	71
Tobacco: Cigars and cigarettes.....	89	7	51	43	84	42	52	71
Vehicles for land transportation	486	2	78	20	97	65	34	89
Automobiles.....	131	2	80	18	96	52	47	80
Carriages and wagons.....	21	5	71	24	95	38	57	71
Car building and repairing, electric-railroad.....	141	1	92	7	99	84	15	96
Car building and repairing, steam-railroad.....	193	2	67	31	96	62	36	93
Miscellaneous industries	201	2	79	19	96	42	56	77
Agricultural implements.....	49	2	63	35	92	27	71	70
Electrical machinery, apparatus, and supplies.....	66	-----	91	9	99	55	45	84
Pianos and organs.....	18	-----	100	-----	100	94	6	97
Rubber-boots and shoes.....	4	-----	50	50	88	50	50	85
Automobile tires.....	44	5	66	30	95	27	68	72
Shipbuilding, steel.....	20	5	95	-----	100	20	75	61
Total	4,993	3	74	23	94	50	48	82

In addition to the returns from 4,993 establishments which appear in the preceding table, reports were received also from 1,365 other firms, but these reports were without percentage figures, the statements reading "full" or "part" time, either with no report as to capacity operation or reading simply "part" capacity.

It was of course impossible to include the data from these 1,365 establishments with the percentage reports in the preceding table. However, by the addition of these "full" and "part" time reports to the figures of the similar section of the table the report of establishments operating full time becomes 72 per cent of 6,358 establishments, instead of 74 per cent of 4,993 establishments, as shown in the table.

It is earnestly hoped that in succeeding reports it will be possible to publish complete percentage data as to these items from all of the establishments which furnish volume of employment statistics to this bureau, because by making such complete returns the reporting establishments would, for themselves, add greatly to the value of this statement as to time and capacity operation.

Wage Changes

DURING the month ending March 15, 1924, wage-rate increases were reported by 32 establishments in 14 of the 52 industries, while decreases in wage rates were reported by 12 establishments in 9 industries. These changes indicate no general trend in any industry, although to a marked degree affecting a few individual establishments. Both the increases and the decreases averaged 6 per cent, the increases affecting 49 per cent, and the decreases 51 per cent of the employees in the establishments concerned.

One large establishment in a small industry made a 5 per cent reduction in the rates of some 4,000 employees, but this change does not appear among the footnotes to the following table, for the reason that it is contrary to the policy of this bureau to publish data which might easily lead to identification of the reporting establishment.

WAGE ADJUSTMENT OCCURRING BETWEEN FEBRUARY 15 AND MARCH 15, 1924

Industry ¹	Establishments		Amount of increase		Employees affected		
	Total number reporting	Number reporting increases	Range	Average	Total number	Per cent of employees	
						In establishments reporting increases	In all establishments reporting
			<i>Per cent</i>	<i>Per cent</i>			
Slaughtering and meat packing.....	82	1	6.0	6.0	176	10	(²)
Confectionery.....	124	1	16.7	16.7	40	89	(²)
Cotton goods.....	288	(³)					
Silk goods.....	227	1	7.0	7.0	10	31	(²)
Iron and steel.....	216	1	1.5	1.5	200	42	(²)
Foundry and machine-shop products.....	626	⁴ 4	5-12	7.9	233	20	(²)
Machine tools.....	183	3 ⁵	5-12	9.5	38	19	(²)
Stoves.....	87	5	5-10	9.0	880	52	5
Lumber, sawmills.....	434	⁶ 6	4-20	6.3	1,059	66	1
Leather.....	129	(⁷)					
Printing, book and job.....	245	1	8	8.0	30	13	(²)
Printing, newspaper.....	199	1	6.7	6.7	165	64	(²)
Fertilizers.....	115	⁷ 2	20-33.3	31.7	274	97	2
Brick and tile.....	336	(⁸)					
Glass.....	138	(⁹)					
Car building and repairing, steam railroad.....	326	2	1.5	1.5	1,951	84	1
Agricultural implements.....	101	¹⁰ 1	10	10.0	89	100	(²)
Electrical machinery, apparatus, and supplies.....	132	3	5-10	6.0	343	34	(²)

¹ The industries for which no wage changes were reported are omitted from this table.

² Less than one-half of 1 per cent.

³ Two establishments decreased the rates of its 410 employees 6.3 per cent.

⁴ Also, 2 establishments decreased the rates of 310 of their 415 employees 10 per cent.

⁵ Also, 1 establishment decreased the rates of its 66 employees 10 per cent.

⁶ Two establishments decreased the rates of 756 of their 934 employees 9.5 per cent.

⁷ Also, 1 establishment decreased the rates of 30 of its 31 employees 20 per cent.

⁸ One establishment decreased the rates of 115 of its 119 employees 20 per cent.

⁹ One establishment decreased the rates of 34 of its 90 employees 20 per cent.

¹⁰ Also, 1 establishment decreased the rates of its 1,965 employees 3 per cent.

Index of Employment in Manufacturing Industries

An index of employment for March, 1923, and for February and March, 1924, is presented in the table following.

[1076]

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES—MARCH, 1924, AS COMPARED WITH FEBRUARY, 1924, AND MARCH, 1923

[Monthly average, 1923=100]

Month and year	General index	Food and kindred products							Textiles and their products.	
		Group index	Slaughtering and meat packing	Confectionery	Ice cream	Flour	Baking	Sugar refining (cane).	Group index	Cotton goods
March 1923	102	96	93			98	98		105	106
February 1924	97	99	101	89	87	99	102	104	97	93
March 1924	96	97	96	89	89	96	102	104	96	90

Month and year	Textiles and their products—Concluded								
	Hosiery and knit goods	Silk goods	Woolen and worsted goods	Carpets	Dyeing and finishing textiles	Clothing, men's.	Shirts and collars	Clothing, women's	Millinery and lace goods
March 1923	103	102	101	100	106	107	104	111	110
February 1924	99	99	97	100	89	102	95	104	95
March 1924	100	98	96	102	88	98	95	104	93

Month and year	Iron and steel and their products								Lumber and its remanufactures	
	Group index	Iron and steel	Structural iron-work	Foundry and machine-shop products	Hardware	Machine tools	Steam-fittings and steam and hot-water heating apparatus.	Stoves	Group index	Lumber, saw-mills
March 1923	100	99		100	101			105	97	96
February 1924	94	104	95	87	100	94	96	93	97	96
March 1924	95	106	92	87	98	94	99	93	97	95

Month and year	Lumber and its remanufactures—Concluded		Leather and its finished products			Paper and printing				
	Lumber, mill-work	Furniture	Group index	Leather	Boots and shoes	Group index	Paper and pulp	Paper boxes	Printing, book and job	Printing, newspaper
March 1923	99	101	105	106	105	100	102	98	101	99
February 1924	101	99	97	95	97	101	97	100	103	103
March 1924	103	99	97	94	98	101	97	100	103	104

[1077]

**INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES—MARCH, 1924, AS
COMPARED WITH FEBRUARY, 1924, AND MARCH, 1923—Concluded**

Month and year	Chemicals and allied products				Stone, clay, and glass products				
	Group index	Chemicals	Fertilizers	Petroleum refining	Group index	Cement	Brick and tile	Pottery	Glass
1923									
March.....	105	103	130	98	96	-----	91	96	102
1924									
February.....	99	99	110	93	95	98	88	107	96
March.....	103	98	138	93	99	99	94	111	100

Month and year	Metal products other than iron and steel		Tobacco manufactures			Vehicles for land transportation				
	Group index	Stamped and enameled ware	Group index	Tobacco, chewing and smoking	Tobacco, cigars, and cigarettes	Group index	Automobiles	Carrriages and wagons	Car building and repairing, electric railroad	Car building and repairing, steam railroad
1923										
March.....	111	111	103	96	104	100	99	107	-----	100
1924										
February.....	102	102	97	108	96	96	110	87	90	87
March.....	105	105	95	106	94	96	112	95	89	86

Month and year	Miscellaneous industries						
	Group index	Agricultural implements	Electrical machinery, apparatus, and supplies	Pianos and organs	Rubber boots and shoes	Automobile tires.	Ship-building, steel
1923							
March.....	107	114	98	99	-----	119	108
1924							
February.....	97	96	102	102	86	94	95
March.....	96	96	102	102	80	95	93

It will be observed that the general index for March, 1924, is 96, or 1 point below that of February, which was 97, while the change in employment in March as given on page 137 is an increase of 0.2 per cent. This apparent difference is due to the fact that the index number is a weighted average of employment in the 52 industries, while the change in employment as stated on page 137 is an unweighted percentage change between the totals of all employees in the establishments covered in March and February. Further, since the index when published is in round numbers the actual variation may appear in exaggerated form, as it does in this case. The February index was 96.62 and the March index is 96.39, but when the fractions are eliminated these become 97 and 96, respectively.

[1078]

General Index of Employment in Manufacturing Industries, June, 1914, to March, 1924

AS STATED in the MONTHLY LABOR REVIEW for April, 1924, the Bureau of Labor Statistics has published monthly volume of employment reports for various manufacturing industries since November, 1915, beginning with 13 industries, which were continued to July, 1922, when the report was enlarged. An index of employment for the enlarged report, beginning with July, 1922, was published in the April MONTHLY LABOR REVIEW.

Herewith is presented a general index of employment in manufacturing industries beginning with June, 1914, and continuing to March, 1924.

The index numbers from November, 1915, to June, 1922, are based on returns from establishments varying in number from 234 to 690 and are in each case weighted averages of the indices of the 13 separate industries which the bureau reported during that period. The weights used represent the number of employees in each industry in 1919. These separate industry indices originally were computed by using January, 1916, as a base, or 100 per cent, but in order that the figures as here presented may be comparable with those of the enlarged report presented in the April MONTHLY LABOR REVIEW these indices have been converted to the base used for the enlarged report, viz., monthly average, 1923 = 100.

The index numbers from July, 1922, to February, 1924, are those published in the April MONTHLY LABOR REVIEW.

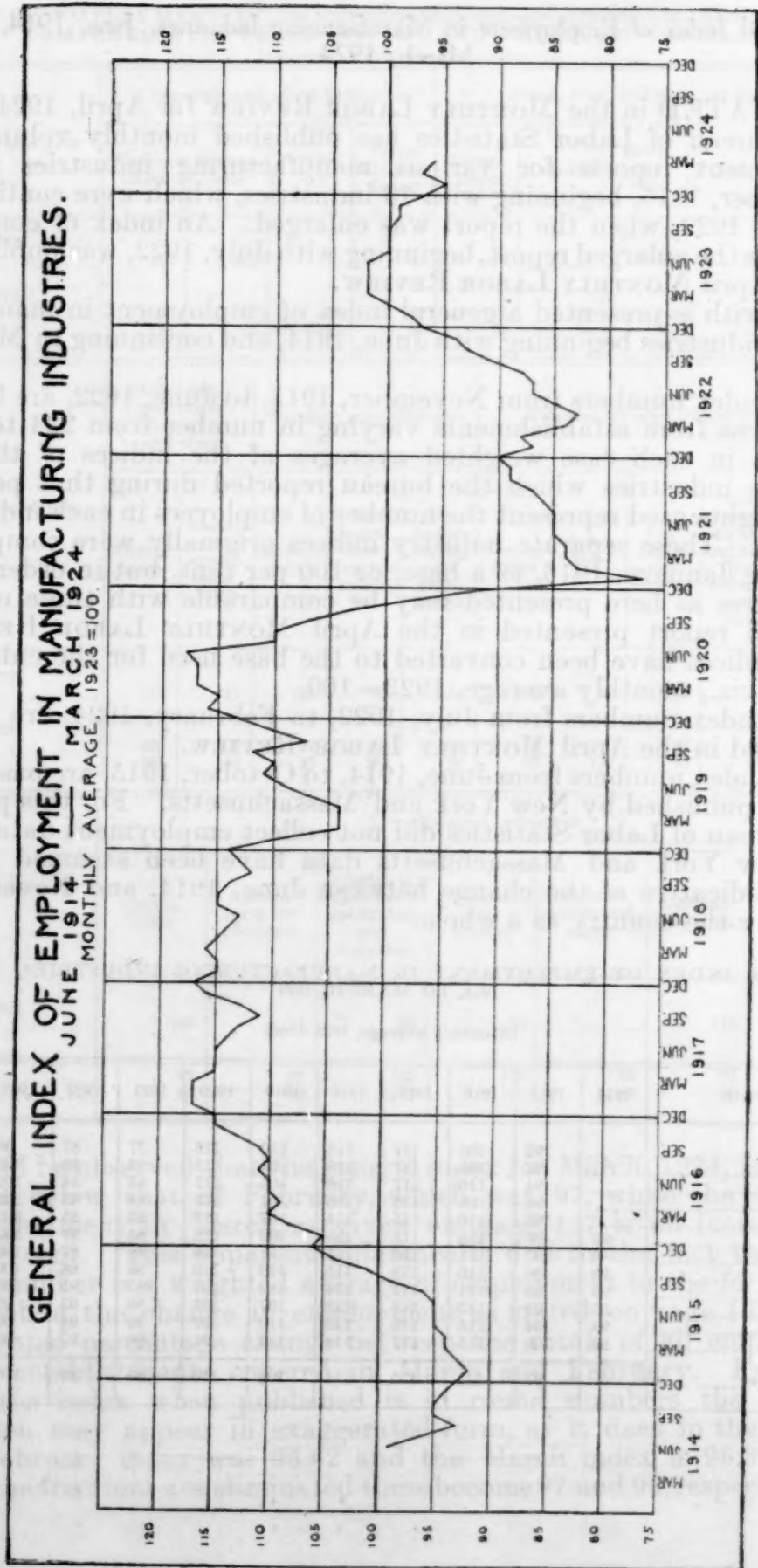
The index numbers from June, 1914, to October, 1915, are based on reports published by New York and Massachusetts. For this period the Bureau of Labor Statistics did not collect employment data, and the New York and Massachusetts data have been assumed to be fairly indicative of the change between June, 1914, and November, 1915, for the country as a whole.

GENERAL INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES, JUNE, 1914, TO MARCH, 1924

[Monthly average, 1923 = 100]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
January		92	105	117	115	110	116	77	87	98	95
February		93	108	117	115	104	115	83	88	100	97
March		94	110	117	116	104	117	84	84	102	93
April		94	109	115	115	104	117	84	83	102	
May		95	110	115	114	107	117	85	85	102	
June	99	96	110	115	113	109	118	85	87	102	
July	96	95	111	114	115	111	110	85	87	100	
August	93	96	110	113	115	110	110	86	88	100	
September	95	99	111	111	114	112	107	87	91	100	
October	95	101	113	113	112	107	103	89	93	99	
November	94	104	115	116	113	110	97	89	94	99	
December	93	106	115	117	114	113	91	90	97	97	
Average		97	111	115	114	108	110	85	89	100	

[1079]



[1080]

Employment and Earnings of Railroad Employees February, 1923, and January and February, 1924

THE following tables show the number of employees and the earnings in various occupations among railroad employees in February, 1924, in comparison with employment and earnings in January, 1924, and February, 1923.

The figures are for Class I roads—that is, all roads having operating revenues of \$1,000,000 a year and over.

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN FEBRUARY, 1924, WITH THOSE OF JANUARY, 1924, AND FEBRUARY, 1923

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

Month and year	Professional, clerical, and general			Maintenance of way and structures			
	Clerks	Stenographers and typists	Total for group	Laborers (extra gang and work train)	Track and roadway section laborers	Total for group	
	Number of employees at middle of month						
February, 1923-----	167, 806	24, 677	279, 877	35, 777	171, 977	326, 627	
January, 1924-----	169, 323	25, 363	283, 485	39, 716	170, 858	336, 150	
February, 1924-----	169, 017	25, 184	282, 740	40, 701	171, 444	335, 449	
Month and year	Total earnings						
	February, 1923-----	\$19, 767, 332	\$2, 789, 654	\$35, 221, 976	\$2, 307, 956	\$10, 910, 119	\$27, 254, 384
	January, 1924-----	21, 670, 569	3, 066, 530	38, 181, 721	2, 820, 766	12, 329, 032	31, 044, 630
February, 1924-----	20, 888, 809	2, 980, 976	37, 102, 740	2, 777, 826	11, 805, 508	29, 794, 395	
Month and year	Maintenance of equipment and stores						
	Carmen	Machinists	Skilled trade helpers	Laborers (shops, engine houses, power plants, and stores)	Common laborers (shops, engine houses, power plants, and stores)	Total for group	
	Number of employees at middle of month						
February, 1923-----	131, 094	67, 502	136, 825	53, 362	63, 264	582, 913	
January, 1924-----	123, 537	64, 512	121, 267	49, 165	61, 079	551, 859	
February, 1924-----	120, 969	65, 123	120, 780	48, 904	60, 933	548, 700	
Month and year	Total earnings						
	February, 1923-----	\$17, 173, 576	\$10, 716, 895	\$14, 092, 481	\$4, 754, 592	\$4, 647, 264	\$71, 047, 650
	January, 1924-----	17, 350, 917	16, 167, 737	13, 073, 363	4, 838, 634	4, 941, 814	70, 632, 854
February, 1924-----	16, 182, 455	9, 672, 871	12, 308, 617	4, 509, 836	4, 660, 250	66, 789, 248	

[1081]

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN FEBRUARY, 1924, WITH THOSE OF JANUARY, 1924, AND FEBRUARY, 1923—Concluded

Month and year	Transportation other than train and yard					Transportation (yard-masters, switch tenders, and hostlers)
	Station agents	Telegraphers, telephones, and towermen	Truckers (stations, warehouses, and platforms)	Crossing and bridge flagmen and gatemen	Total for group	
	Number of employees at middle of month					
February, 1923	31,503	27,254	40,207	22,430	209,916	26,299
January, 1924	31,506	27,094	36,903	22,892	206,341	25,747
February, 1924	31,436	26,964	38,992	22,870	208,379	25,728
Total earnings						
February, 1923	\$4,387,624	\$3,599,920	\$3,290,727	\$1,567,139	\$23,004,719	\$4,477,326
January, 1924	4,788,127	3,963,931	3,383,118	1,711,334	24,811,744	4,566,714
February, 1924	4,554,836	3,722,196	3,461,148	1,696,042	24,049,636	4,410,860

Month and year	Transportation, train and engine					Total for group
	Road conductors	Road brakemen and flagmen	Yard brakemen and yardmen	Road engineers and motormen	Road firemen and helpers	
	Number of employees at middle of month					
February, 1923	38,153	79,388	54,998	46,985	48,970	341,741
January, 1924	36,972	77,061	53,553	44,913	47,346	330,057
February, 1924	37,602	77,596	55,064	45,760	47,879	336,033
Total earnings						
February, 1923	\$8,417,553	\$12,813,711	\$8,584,329	\$11,596,981	\$8,573,552	\$62,558,406
January, 1924	8,535,491	12,709,847	8,798,118	11,659,694	8,624,584	63,259,974
February, 1924	8,262,286	12,375,054	8,749,406	11,235,100	8,302,987	61,712,680

Extent of Operation of Bituminous Coal Mines, March 1 to 22, 1924

CONTINUING a series of tables which have appeared in previous numbers of the MONTHLY LABOR REVIEW, the accompanying table shows for a large number of coal mines in the bituminous fields the number of mines closed the entire week and the number working certain classified hours per week from March 1, 1924, to March 22, 1924. The number of mines reporting varied each week, and the figures are not given as being a complete presentation of all mines but are believed fairly to represent the conditions as to regularity of work in the bituminous mines of the country. The mines included in this report ordinarily represent 55 to 60 per cent of the total output of bituminous coal. The figures are based on data furnished to the Bureau of Labor Statistics by the United States Geological Survey.

WORKING-TIME IN THE BITUMINOUS COAL MINES IN THE UNITED STATES, BY WEEKS, MARCH 1 TO 22, 1924

[The mines included ordinarily represent from 55 to 60 per cent of the total output. Prepared by the Bureau of Labor Statistics from data furnished by the United States Geological Survey]

Week ending—	Number of mines reporting	Mines—															
		Closed entire week		Working less than 8 hours		Working 8 and less than 16 hours		Working 16 and less than 24 hours		Working 24 and less than 32 hours		Working 32 and less than 40 hours		Working 40 and less than 48 hours		Working full time of 48 hours or more	
		No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
1924																	
Mar. 1	2,414	691	28.6	28	1.2	147	6.1	265	11.0	396	16.4	407	16.9	287	11.9	193	8.0
8	2,362	746	31.7	34	1.4	184	7.8	294	12.4	317	13.4	340	14.4	255	10.8	190	8.0
15	2,379	814	34.2	38	1.6	158	6.6	293	12.3	366	15.4	286	12.0	223	9.4	201	8.4
22	2,418	825	34.1	49	2.0	170	7.0	305	12.6	348	14.4	261	10.8	240	9.9	220	9.1

Recent Employment Statistics

Illinois

CHANGES in the number of employees on the pay rolls in the various Illinois industries from January to February, 1924, are indicated by the following figures taken from the March, 1924, issue of The Labor Bulletin of the State department of labor:

COURSE OF EMPLOYMENT FROM THE REPORTING PERIOD IN JANUARY, 1924, TO THE REPORTING PERIOD IN FEBRUARY, 1924

Industry	Number of employees on pay roll February, 1924	Per cent of change. January to February, 1924
Stone, clay, and glass products:		
Miscellaneous and mineral	1,789	+5.0
Lime, cement, and plaster	376	+9.6
Brick, tile, and pottery	4,871	+3.3
Glass	4,240	+4.0
Total	11,276	+4.0
Metals, machinery, and conveyances:		
Iron and steel	37,204	+6.2
Sheet-metal work and hardware	8,897	+10.1
Tools and cutlery	1,910	+8.2
Cooking, heating, ventilating apparatus	5,374	+11.4
Brass, copper, zinc, babbitt metal	2,541	+2.1
Cars and locomotives	15,191	-2.6
Automobiles and accessories	8,469	+11.3
Machinery	18,157	+1.9
Electrical apparatus	48,094	+3.8
Agricultural implements	8,418	+3.1
Instruments and appliances	2,404	+3.4
Watches, watchcases, clocks, jewelry	4,864	+0.8
Total	161,523	+4.3
Wood products:		
Sawmill and planing-mill products	2,424	-1.9
Furniture and cabinet work	7,451	+7.0
Pianos, organs, and other musical instruments	2,638	-3.5
Miscellaneous wood products	2,853	-2.8
Household furnishings	594	+7.0
Total	15,960	+1.9
Furs and leather goods:		
Leather	2,040	-5.6
Furs and fur goods	57	-6.6
Boots and shoes	9,217	- .4
Miscellaneous leather goods	1,931	+3.2
Total	13,245	- .7

[1083]

COURSE OF EMPLOYMENT FROM THE REPORTING PERIOD IN JANUARY, 1924, TO
THE REPORTING PERIOD IN FEBRUARY, 1924—Concluded

Industry	Number of employees on pay roll February, 1924	Per cent of change, January to February, 1924
Chemicals, oils, paints, etc.:		
Drugs and chemicals.....	2,359	-8.7
Paints, dyes, and colors.....	2,371	+2.9
Mineral and vegetable oils.....	3,759	+3.9
Miscellaneous chemical products.....	4,117	+ .2
Total.....	12,606	- .1
Printing and paper goods:		
Paper boxes, bags, and tubes.....	3,877	- .3
Miscellaneous paper goods.....	1,556	+2.5
Job printing.....	9,964	+ .8
Newspapers and periodicals.....	2,826	-3.6
Total.....	18,223	(1)
Textiles:		
Cotton goods.....	621	+ .2
Knit goods, cotton and woolen hosiery.....	1,957	-4.2
Thread and twine.....	743	- .8
Total.....	3,321	-2.6
Clothing, millinery, and laundering:		
Men's clothing.....	13,593	+ .8
Men's shirts and furnishings.....	989	+6.9
Overalls and work clothing.....	887	-2.0
Men's hats and caps.....	72	-7.7
Women's clothing.....	1,647	+4.0
Women's underwear and furnishings.....	594	+9.6
Women's hats.....	1,382	+6.1
Laundering, cleaning, and dyeing.....	2,002	-3.7
Total.....	21,166	+1.3
Food, beverages, and tobacco:		
Flour, feed, and other cereal products.....	1,186	+13.1
Fruit and vegetable canning and preserving.....	477	+16.9
Groceries not elsewhere classified.....	4,846	+2.0
Slaughtering and meat packing.....	26,197	-5.5
Dairy products.....	3,393	- .2
Bread and other bakery products.....	2,669	+1.3
Confectionery and ice cream.....	2,898	-1.3
Beverages.....	751	+1.6
Cigars and other tobacco products.....	1,452	+18.6
Manufactured ice.....	221	-1.3
Total.....	44,090	-2.2
Total, all manufacturing industries.....	301,410	+2.2
Trade, wholesale and retail:		
Department stores.....	2,496	-2.1
Wholesale dry goods.....	50	-7.4
Wholesale groceries.....	778	+1.0
Mail-order houses.....	15,935	-1.3
Total.....	19,259	-1.3
Public utilities:		
Water, light, and power.....	14,070	-2.1
Telephone.....	25,982	+2.1
Street railways.....	25,950	+ .7
Railway car repair shops.....	12,939	+ .7
Total.....	78,941	+ .6
Coal mining.....	17,807	-2.1
Building and contracting:		
Building construction.....	5,736	-4.3
Road construction.....	116	-5.7
Miscellaneous contracting.....	792	-31.6
Total.....	6,644	-8.7
Total, all industries.....	424,061	+1.4

1 Increase of less than one-tenth of 1 per cent

[1084]

The records of the public employment offices of Illinois for February, 1923, and February, 1924, are here summarized:

ACTIVITIES OF THE ILLINOIS FREE EMPLOYMENT OFFICES IN FEBRUARY, 1923, AND FEBRUARY, 1924

Item	February, 1923			February, 1924		
	Male	Female	Total	Male	Female	Total
Number of applicants.....	14, 193	4, 844	19, 037	12, 731	5, 997	18, 728
Number of persons applied for.....	12, 898	5, 415	18, 313	7, 163	4, 894	12, 057
Number of persons referred to positions.....	11, 474	4, 559	16, 033	7, 190	4, 728	11, 918
Number of persons reported placed.....	9, 412	3, 911	13, 323	5, 658	3, 989	9, 647

The ratio of persons registered to 100 available positions in February, 1923, was 103.9; in February, 1924, 155.3.

Iowa

THE rise or fall in volume of employment in the various Iowa industries in February, 1924, compared with the preceding month is indicated in the table below, which is an abridgment of a report furnished by the State Bureau of Labor Statistics:

CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, JANUARY TO FEBRUARY, 1924

Industry group	Employees on pay roll February, 1924		Industry group	Employees on pay roll February, 1924	
	Number	Per cent of increase (+) or decrease (-) as compared with January, 1924		Number	Per cent of increase (+) or decrease (-) as compared with January, 1924
Food and kindred products:			Leather products:		
Meat packing.....	7, 004	-2.4	Shoes.....	337	-3.2
Cereals.....	1, 120	+2.1	Saddlery and harness.....	379	-----
Flour and mill products.....	131	-5.8	Fur goods, tanning, and gloves.....	108	+18.7
Bakery products.....	434	+2.6	Total.....	824	+7.9
Confectionery.....	529	-5.5	Paper products, printing and publishing:		
Poultry, produce, butter, etc.....	580	-19.9	Paper and its products.....	368	-----
Sugar, sirup, starch, etc.....	886	-3.9	Printing and publishing.....	2, 543	+1.0
Other food products, coffee, etc.....	137	+15.1	Total.....	2, 911	+1.2
Total.....	10, 821	-3.1	Patent medicines.....	396	-6.8
Textiles:			Stone and clay products:		
Clothing, men's.....	828	+2.1	Cement, plaster, gypsum.....	1, 928	+3.6
Millinery.....	213	-11.2	Brick and tile (clay).....	697	+9.9
Clothing, women's, and woolen goods.....	413	+4.8	Marble, granite, crushed rock, and stone.....	150	+7.9
Gloves, hosiery, awnings, etc.....	420	+2.4	Total.....	2, 775	+5.4
Buttons, pearl.....	1, 010	+8.7	Tobacco, cigars.....	367	-4.7
Total.....	2, 884	+3.6	Railway car shops.....	8, 406	-7.8
Iron and steel work:			Various industries:		
Foundry and machine shops (general classification).....	3, 065	+5.8	Brooms and brushes.....	181	+1.7
Brass and bronze products, plumbers' supplies.....	225	-2.2	Laundries.....	169	-3.4
Automobiles, tractors, etc.....	2, 012	-2.2	Mercantile.....	3, 870	-.3
Furnaces.....	384	-10.1	Public service.....	323	+9
Pumps.....	357	+5.9	Seeds.....	163	-34.3
Agricultural implements.....	1, 106	+2.3	Wholesale houses.....	979	-1.9
Washing machines.....	1, 309	+10.0	Other industries.....	1, 024	-3.4
Total.....	8, 458	+2.9	Total.....	6, 709	-2.2
Lumber products:			Grand total.....	40, 279	-1.3
Millwork, interiors, etc.....	3, 131	+4.5			
Furniture, desks, etc.....	771	+5.9			
Refrigerators.....	449	+3.7			
Coffins, undertaker's goods.....	171	-2.8			
Carriages, wagons, truck bodies.....	206	-3.3			
Total.....	4, 728	+4.0			

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Maryland

THE following figures are taken from a more detailed statistical statement on volume of employment and amounts of pay rolls in March, 1924, in the industries of Maryland, which was furnished by the commissioner of labor and statistics of that State:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN FEBRUARY AND MARCH, 1924

Industry	Number on pay roll one week in March, 1924	Per cent of increase (+) or decrease (-), March, compared with February, 1924	Amount of pay roll one week in March, 1924	Per cent of increase (+) or decrease (-), March, compared with February, 1924
Bakery	552	-5.2	\$10,793.98	-5.3
Beverages and soft drinks	215	+11.4	5,776.92	+8.4
Boots and shoes	1,299	+6	23,258.13	+2.6
Boxes, fancy and paper	511	+4.9	7,542.07	+3.9
Boxes, wooden	468	-1.9	8,499.69	+3.4
Brass and bronze	2,439	-5.8	56,921.33	-4.0
Brick, tile, etc.	898	+3.0	21,194.03	+7
Brushes	1,112	-7	22,074.80	+5
Canning and preserving	300	+12.7	5,276.05	+19.0
Car building and repairing	4,406	+6	154,337.65	+9.6
Chemicals	1,428	+8.3	36,733.90	+2.3
Clothing, men's outer garments	4,161	-8.7	89,153.58	-7.3
Clothing, women's outer garments	1,395	+4.4	19,136.40	+6.3
Confectionery	909	+1.9	12,665.66	-1.6
Cotton goods	2,342	-7.6	38,035.99	-9.2
Fertilizer	1,228	+12.1	29,040.16	+18.2
Food preparation	110	-1.8	2,702.79	+4
Foundry	1,473	-2	36,442.72	-7.0
Furnishing goods, men's	3,505	-9	44,672.82	-2
Furniture	878	+1.9	21,304.87	+1.1
Glass	1,407	-3.9	32,220.09	+4.2
Ice cream	345	+1.5	10,106.15	+1.7
Leather goods	667	+4.5	12,426.52	-9
Lithographing	459	+1.3	13,359.89	+2
Lumber and planing	1,051	+3.9	17,443.36	-7
Mattresses and spring beds	104	-11.9	2,442.94	10.3
Patent medicines	218	-6.5	3,939.55	-1.6
Pianos	914	+7	25,092.69	+8.8
Plumbers' supplies	1,421	+6.0	37,320.61	+2.2
Printing	1,474	+2	48,574.53	-2
Rubber tire manufacture	12,639	+3.4	133,326.95	+13.1
Shipbuilding	522	-34.1	14,381.05	-36.3
Shirts, etc.	1,659	-4.0	22,200.41	-6.1
Silk goods	446	-9.9	7,257.79	-11.3
Slaughtering and meat packing	1,464	-4.0	37,927.79	-6.0
Stamped and enameled ware	909	-1.7	17,670.31	-1.1
Stoves	521	-1.9	12,639.46	-3.2
Tinware	3,214	+2.0	64,433.95	+1.7
Tobacco	1,527	-8.1	23,985.59	-2.8
Umbrellas	336	-5.7	6,840.44	-4.4
Miscellaneous	4,047	+9	86,896.21	-2.1

¹ Pay roll for one-half month.

Massachusetts ¹

IN THE table given below comparison is made between volume of employment and average earnings in Massachusetts manufacturing establishments in January and February, 1924:

NUMBER OF EMPLOYEES AND AVERAGE WEEKLY EARNINGS IN MASSACHUSETTS MANUFACTURING ESTABLISHMENTS, WEEK INCLUDING OR ENDING NEAREST TO JANUARY 15 AND FEBRUARY 15, 1924

Industry	Number of establishments	Number of employees on pay roll—		Average weekly earnings—	
		January, 1924	February, 1924	January, 1924	February, 1924
Automobiles, including bodies and parts.....	11	1,722	1,762	\$28.67	\$28.41
Boot and shoe cut stock and findings.....	50	1,811	1,872	22.44	25.82
Boots and shoes.....	71	22,964	23,356	23.56	23.55
Boxes, paper.....	25	2,266	2,299	20.28	20.96
Boxes, wooden packing.....	9	885	873	22.15	22.46
Bread and other bakery products.....	36	3,360	3,261	22.91	23.23
Cars and general shop construction and repairs, steam railroad companies.....	4	3,313	3,178	30.06	30.81
Clothing, men's.....	28	2,714	3,078	22.24	22.17
Clothing, women's.....	25	994	1,777	18.99	18.41
Confectionery.....	13	3,492	3,357	18.62	17.88
Copper, tin, sheet iron, etc.....	14	774	787	26.42	27.20
Cotton goods.....	41	33,308	32,930	20.73	20.52
Cutlery and tools.....	23	4,628	4,754	24.02	24.22
Dyeing and finishing, textiles.....	6	5,118	6,084	23.88	22.87
Electrical machinery, apparatus, and supplies.....	12	9,787	9,540	27.66	27.34
Foundry and machine-shop products.....	65	9,761	9,465	27.82	27.72
Furniture.....	23	2,291	2,260	26.40	26.77
Hosiery and knit goods.....	8	3,924	3,590	17.96	18.10
Jewelry.....	30	2,918	2,881	23.08	22.73
Leather, tanned, curried, and finished.....	24	4,709	4,849	26.67	26.75
Machine tools.....	25	2,273	2,261	27.67	27.63
Musical instruments.....	8	982	963	28.42	28.29
Paper and wood pulp.....	21	5,875	6,020	26.26	26.48
Printing and publishing, book and job.....	34	2,654	2,669	31.76	31.83
Printing and publishing, newspaper.....	20	2,071	2,085	38.93	39.52
Rubber goods.....	7	2,703	2,732	23.72	23.56
Rubber footwear.....	3	8,253	7,873	24.68	23.59
Rubber tires and tubes.....	3	1,068	1,146	33.40	32.36
Silk goods.....	11	2,098	2,186	20.18	20.66
Slaughtering and meat packing.....	4	1,803	1,602	23.35	21.52
Stationery goods.....	8	1,047	998	20.16	21.07
Steam fittings and steam and hot-water heating apparatus.....	5	1,501	1,623	26.49	28.20
Textile machinery and parts.....	11	3,725	3,608	28.30	28.74
Tobacco.....	7	1,039	982	24.70	23.75
Woolen and worsted goods.....	38	15,055	15,349	22.07	22.61
All other industries.....	104	34,364	33,732	25.79	25.70
Total.....	827	207,250	207,182	24.30	24.22

¹ Massachusetts. Department of Labor and Industries. Mimeograph report received Apr. 3, 1924.

The records of the four State employment offices of Massachusetts show that during February, 1924, there were 2,141 persons reported placed, which was 1.7 per cent less than the number reported placed in the previous month. The number of persons called for in February, 1924 (2,538), was 0.7 per cent less than in the first month of this year. It must be noted, however, that these offices were open 26 days in January and only 24 days in February, so that the daily averages for the latter month were above those of the preceding month. The number of persons reported placed by these offices in the first two months of 1924 was 32.9 per cent less than in the corresponding months of the preceding year. The number of persons called for by employers was 37.8 per cent less in January and February, 1924, than in January and February, 1923.

Minnesota

ACCORDING to a typewritten report on the work of the employment division of the Minnesota Industrial Commission, the number of men placed in clerical and skilled positions and the number of women placed in clerical, industrial, and hotel positions were substantially larger in March, 1924, than in March, 1923.

A summary of the operations of the State employment offices in certain cities for the two above-mentioned periods is given below:

NUMBER OF PERSONS REFERRED TO POSITIONS AND PLACED BY MINNESOTA EMPLOYMENT DIVISION IN ST. PAUL, MINNEAPOLIS, AND DULUTH, MARCH, 1923, AND MARCH, 1924

Sex and type of labor	Referred		Placed	
	1923	1924	1923	1924
Men:				
Farm.....	472	525	237	325
Clerical.....	90	112	32	55
Skilled.....	461	751	259	564
Unskilled.....	1,724	1,611	1,405	1,375
Casual.....	726	545	690	536
Total.....	3,473	3,544	2,623	2,855
Women:				
Domestic.....	182	221	124	122
Hotel-restaurant.....	350	441	281	311
Casual.....	1,418	1,428	1,412	1,426
Industrial.....	53	107	42	78
Clerical.....	160	329	104	179
Total.....	2,163	2,526	1,963	2,116

New York

THE following advance figures from the New York State Department of Labor show the fluctuations in numbers of employees and amounts of pay rolls in certain manufacturing industries in New York State, February, 1924, compared with January, 1924, and February, 1923:

PER CENT OF CHANGE IN VOLUME OF EMPLOYMENT AND PAY ROLL IN NEW YORK STATE MANUFACTURING INDUSTRIES IN FEBRUARY, 1924, AS COMPARED WITH FEBRUARY, 1923, AND JANUARY, 1924

Industry	Per cent of change			
	January, 1924, to February, 1924		February, 1923, to February, 1924	
	Number of employees	Amount of pay roll	Number of employees	Amount of pay roll
Cement.....	-6.3	-9.6	+0.4	+10.8
Brick.....	-27.1	-28.4	+7.9	+39.7
Pottery.....	+2.3	+2.9	+4.9	+28.4
Glass.....	+8	+9	-5.4	+5.9
Pig iron and rolling mill products.....	+9.9	+9.6	+3.4	+15.4
Structural and architectural iron work.....	-1.6	-2.3	+12.2	+21.8
Hardware.....	+3.6	+4.5	+4.6	+15.4
Stamped ware.....	+6.4	+12.2	-9.6	+3.6
Cutlery and tools.....	+4.4	+2.6	+5.0	+14.0
Steam and hot water heating apparatus.....	+2.4	+3.4	-14.0	+2
Stoves.....	+13.2	+18.6	+3.7	+29.8
Agricultural implements.....	-1.3	(1)	-16.1	-2.1
Electrical machinery, apparatus, etc.....	+5	-2.1	+7.7	+22.8
Foundry and machine shops.....	(2)	-5.7	-6.9	+6
Automobiles and parts.....	+2.3	+4.8	+9.3	+16.3
Car, locomotive, and equipment factories.....	-17.4	-20.6	-31.8	-26.3
Railway repair shops.....	-3.2	+2.4	-9.0	-11.1
Lumber, millwork.....	-1.2	-6.6	+4.3	+12.0
Lumber, sawmills.....	-5.2	-6.0	-13.7	-1.0
Furniture and cabinet work.....	-6	+1	-1.7	+6.5
Furniture.....	-6	+1.5	-4.1	+3.6
Pianos, organs, and other musical instruments.....	-8	-2.0	+8.8	+18.2
Leather.....	+1.7	-1.7	-12.3	-3.1
Boots and shoes.....	+1.3	+2.6	-2.5	-1.3
Drugs and chemicals.....	-1.5	-2.5	+3.1	+13.6
Petroleum refining.....	+3	-3.3	+6	+3.6
Paper boxes and tubes.....	+7	-8	-8	+7.4
Printing, newspapers.....	-4.6	-5.7	-5.6	-9
Printing, book and job.....	-1.1	-2.9	-6.3	-8
Silk and silk goods.....	-3.6	-7.2	-6.8	-6.7
Carpets and rugs.....	+1.1	+7.9	+4.7	+12.6
Woolens and worsteds.....	+19.0	+31.0	-9.2	-4.2
Cotton goods.....	-4.0	-16.3	-21.1	-32.9
Cotton and woolen hosiery and knit goods.....	+6.2	+9.7	-2.7	+6.4
Dyeing and finishing textiles.....	+26.4	+23.1	-7.2	-9.9
Men's clothing.....	+5.4	+10.0	-4.1	+3
Shirts and collars.....	-2.3	+2	-15.8	-16.4
Women's clothing.....	+4.7	+9.0	-6.3	-4.5
Women's headwear.....	-5.1	-5.5	-1.8	+4.6
Flour.....	-5.2	-9.2	+4	+9.0
Sugar refining.....	+52.6	+50.7	-19.4	-7
Slaughtering and meat products.....	-1.0	-8	+5.7	+16.0
Bread and other bakery products.....	+6.2	+8.1	+7.7	+12.2
Confectionery and ice cream.....	-3.5	-8.2	-8.9	+4.0
Cigars and other tobacco products.....	-1.2	-8.4	-7.3	+6.2

¹ Decrease of less than one-tenth of 1 per cent.

No change.

The results of a survey of part-time employment in the principal industries of the State in 1923 are summarized in the table following.²

² New York. Department of Labor. Industrial Bulletin, February, 1924.

EXTENT OF PART-TIME EMPLOYMENT IN REPRESENTATIVE FACTORIES IN NEW YORK STATE IN DECEMBER, 1923

Industry	Men				Women				Total ¹			
	Total number employed	Per cent employed—			Total number employed	Per cent employed—			Number employed	Per cent employed—		
		Over-time	Full time	Part time		Over-time	Full time	Part time		Over-time	Full time	Part time
Stone, clay, and glass products.....	10,850	12.7	72.1	15.2	1,086	7.9	80.5	11.6	11,945	12.3	72.0	14.8
Metals, machinery, and conveyances.....	143,863	19.1	66.0	14.9	12,549	12.7	71.4	15.9	161,099	18.4	66.3	15.3
Wood manufactures.....	18,798	18.1	67.8	14.1	2,211	14.3	66.7	19.0	21,160	17.7	67.8	14.5
Furs, leather, and rubber goods.....	11,085	13.2	64.1	22.7	4,939	7.3	66.4	26.3	17,269	10.7	66.7	22.6
Chemicals, oils, paints, etc.....	16,823	15.3	75.5	9.2	3,389	8.5	65.7	25.8	20,535	13.7	74.0	11.7
Paper.....	7,919	32.7	53.2	14.1	243	.4	51.0	48.6	8,162	31.8	53.1	15.1
Printing and paper goods.....	13,681	33.9	56.2	9.9	5,989	14.1	69.6	16.3	20,870	26.7	61.9	11.4
Textiles.....	22,374	17.1	60.8	22.1	20,605	3.0	67.5	29.5	45,748	10.6	65.0	24.4
Clothing, millinery, laundering, etc.....	11,979	5.4	76.2	18.4	24,257	2.6	64.5	32.9	40,464	3.3	68.5	28.2
Food, beverages, and tobacco.....	17,299	17.6	66.9	15.5	6,451	1.5	78.9	19.6	25,919	12.5	72.2	15.3
Water, light, and power.....	3,754	17.1	78.9	4.0	4	---	100.0	---	3,758	17.1	79.0	3.9
Total.....	278,434	18.6	66.3	15.1	81,723	5.9	68.2	25.9	377,229	15.3	67.2	17.5

¹ The total number of employees is larger in some industries than the combined figures for men and women because information was available for the whole force in some establishments but not for men and women separately.

Changes in average weekly earnings and in pay rolls and employment for the past 10 years are indicated in the tabular statement given below: ²

AVERAGE WEEKLY EARNINGS AND INDEX NUMBERS OF PAY ROLLS AND EMPLOYMENT IN NEW YORK STATE FACTORIES, 1914 TO 1923

Year	Average weekly earnings of all employees ¹	Index numbers (June, 1914=100)		Year	Average weekly earnings of all employees ¹	Index numbers (June, 1914=100)	
		Amount of pay roll	Number employed			Amount of pay roll	Number employed
1914.....	\$12.48	94	95	1919.....	\$23.50	213	114
1915.....	12.85	101	98	1920.....	28.15	264	118
1916.....	14.43	131	114	1921.....	25.72	188	92
1917.....	16.37	156	120	1922.....	25.04	197	96
1918.....	20.35	197	122	1923.....	27.24	238	110

¹ The average weekly earnings are obtained by dividing the total weekly pay roll by the total number of employees on the pay roll for the given week. Reports cover the week including the 15th of the month.

Ohio

THE following report on the operations of the State-city employment service of Ohio for March, 1924, was furnished by the State department of industrial relations:

RECORDS OF PUBLIC EMPLOYMENT OFFICES IN OHIO FOR MARCH, 1924

Group	Number of applicants	Help wanted	Number referred to positions	Number reported placed
Males (skilled, unskilled, clerical, and professional).....	34,523	11,280	11,186	9,633
Females (domestic, industrial, clerical, and professional).....	14,609	8,422	7,829	6,533
Total.....	49,132	19,702	19,015	16,444

In the above totals are included the following figures for farm and dairy labor: Applicants, 475; help wanted, 375; referred to positions, 353, and reported placed, 246.

Pennsylvania ³

A SUMMARY of the activities of the Pennsylvania State employment offices for 1923 and the four preceding years is given below:

OPERATIONS OF STATE EMPLOYMENT OFFICES OF PENNSYLVANIA, 1920 TO 1923

Year	Persons applying for positions	Persons asked for by employers	Persons sent to positions	Persons receiving positions
1920.....	310,943	557,882	242,702	227,795
1921.....	525,222	91,793	80,283	71,443
1922.....	304,916	172,174	147,408	131,348
1923.....	219,275	212,673	164,032	150,675

Wisconsin ⁴

THE table here given shows the fluctuations in volume of employment and pay rolls in various industries in Wisconsin from January to February, 1924, and from February, 1923, to February, 1924:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND PAY ROLL IN VARIOUS KINDS OF EMPLOYMENT IN WISCONSIN, FEBRUARY, 1924, COMPARED WITH JANUARY, 1924, AND WITH FEBRUARY, 1923

Kind of employment	Per cent of change—			
	January to February, 1924		February, 1923, to February, 1924	
	Employment	Pay roll	Employment	Pay roll
<i>Manual</i>				
Agriculture.....			+1.2	
Logging.....	+5.1		+7	
Mining.....	-3.4	+2.0	+31.1	+38.3
Lead and zinc.....	-8.8	-5.4	+85.1	+92.3
Iron.....	+1.3	+7.9	+7.1	+15.7
Stone crushing and quarrying.....	+9	+4.4	+20.5	+38.5
Manufacturing.....	+3.4	+11.7	+1	+9.7
Stone and allied industries.....	-5.6	-4.1	-2.1	+7.7
Brick, tile, and cement blocks.....	-22.6	-22.9	-45.0	-33.0
Stone finishing.....	-1.0	+8	+17.0	+22.4
Metal.....	+4.4	+17.7	-2.3	+12.3
Pig iron and rolling-mill products.....	+2.9	+5.1	-5.3	+5.5
Structural ironwork.....	+2	-7.4	+10.3	+37.7
Foundries and machine shops.....	+6.9	+15.4	+5	+20.8
Railroad repair shops.....	-9.1	-1.7	-1.7	-3.4
Stoves.....	+16.4	+59.2	+2	+8.9
Aluminum and enamel ware.....	+9.7	+22.8	-13.5	-3.7
Machinery.....	-2	+9.3	-2	+19.6
Automobiles.....	+9.0	+48.7	-14.4	-15.1
Other metal products.....	+11.9	+25.4	+9.1	+60.1
Wood.....	+8.2	+16.8	+3.7	+15.7
Sawmills and planing mills.....	+16.0	+26.1	+12.7	+29.2
Box factories.....	+2.2	+11.0	.0	+21.2
Panel and veneer mills.....	+1.6	+11.5	.0	+13.0
Sash, doors, and interior finish.....	+4.6	+9.8	+3.5	+12.0
Furniture.....	+3.4	+16.2	-9.9	-2.8
Other wood products.....	+7.2	+10.7	+5.0	+17.4
Rubber.....	-2.8	-4.2	+6.6	+11.0

³ Pennsylvania. Department of Labor and Industry. Labor and Industry, March, 1924.

⁴ Wisconsin. Industrial Commission. Wisconsin Labor Market, February, 1924.

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND PAY ROLL IN VARIOUS KINDS OF EMPLOYMENT IN WISCONSIN, FEBRUARY, 1924, COMPARED WITH JANUARY, 1924, AND WITH FEBRUARY, 1923—Concluded

Kind of employment	Per cent of change—			
	January to February, 1924		February, 1923, to February, 1924	
	Employment	Pay roll	Employment	Pay roll
<i>Manual—Concluded</i>				
Manufacturing—Concluded				
Leather.....	+3.5	+1.9	-10.6	-10.6
Tanning.....	.0	-.8	-8.2	-2.2
Boots and shoes.....	+2.5	+.2	-20.0	-25.7
Other leather products.....	+12.4	+13.2	+8.0	+18.4
Paper.....	+1.8	+14.3	+4.5	+11.1
Paper and pulp mills.....	+1.3	+14.6	+4.5	+10.5
Paper boxes.....	+5.1	+4.8	+2.3	+10.8
Other paper products.....	+1.2	+21.1	+6.6	+14.1
Textiles.....	+6.8	+11.4	+1.4	-1.2
Hosiery and other knit goods.....	+12.9	+22.0	+19.4	+17.2
Clothing.....	-.6	-1.2	-8.3	-13.5
Other textile products.....	+1.1	+9.9	-24.3	-19.2
Foods.....	-7.8	-2.8	+.8	+8.5
Meat packing.....	-25.3	-13.0	-3.8	-2.3
Baking and confectionery.....	+3.0	+3.9	+9.1	+15.3
Milk products.....	-4.9	+2.8	+4.5	+14.1
Canning and preserving.....	+15.0	-1.8	-2.6	+3.3
Flour mills.....	+10.0	+19.1	-13.3	-10.6
Tobacco manufacturing.....	-41.9	-41.9	-55.4	-56.7
Other food products.....	-1.4	-.1	+34.6	+55.6
Light and power.....	-1.3	+1.7	+21.3	+32.8
Printing and publishing.....	+1.8	+5.7	+5.0	+16.3
Laundering, cleaning, and dyeing.....	+1.3	-4.0	+7.7	+11.5
Chemicals (including soap, glue, and explosives).....	+.7	+.1	-8.4	-5.5
Construction:				
Building.....	-19.7	-2.4	+5.1	+32.9
Highway.....	+108.0		+88.6	+5.0
Railroad.....	+7.0	+7.4	+1.4	+7.8
Marine, dredging, and sewer digging.....	+6.3	+21.7	+17.4	+6.5
Communication:				
Steam railways.....	+5.6	+14.8	-5.9	+15.0
Electric railways.....	+5.9	+6.1	+9.0	+13.9
Express, telephone, and telegraph.....	-4.1	-5.9	+3.6	+4.2
Wholesale trade.....	+2.2	+20.3	-2.4	+5.9
Hotels and restaurants.....	+6.8		+7.6	
<i>Nonmanual</i>				
Manufacturing, mines, and quarries.....	+.5	+2.3	+4.7	+9.4
Construction.....	-1.7	+9.6	-17.7	-2.6
Communication.....	+1.6	+.5	+7.9	+8.8
Wholesale trade.....	-.4	+4.6	+.4	+1.8
Retail trade—Sales force only.....	-3.2	-3.8	+.7	+15.8
Teachers.....				
Urban.....				
Rural.....				
Miscellaneous—Professional services.....	+.4	-2.2	+7.3	+10.3
Hotels and restaurants.....	-1.2		-6.6	

The public employment offices of Wisconsin placed 6,947 persons in February, 1924, which was about 20 per cent more than the number placed in the preceding month (4 weeks) but approximately 9 per cent less than the number placed in February, 1923.

Unemployment in Foreign Countries¹

SINCE the last publication in the MONTHLY LABOR REVIEW (February, 1924, pp. 156-166) of data on unemployment in foreign countries, considerable changes in the general situation as regards the state of employment have occurred. With the coming of the win-

¹ Except where otherwise noted, the sources from which this article is compiled are shown in the table on pp. 169 and 170.

ter, seasonal unemployment began to set in and this became more intensive as winter progressed. The open-air industries were to a very great extent responsible for the upward trend in unemployment in certain countries. The latest available statistics show increased unemployment in all the countries for which statistics are shown except Great Britain, the increase being especially marked in Italy and Austria.

Briefly summarized the situation in the individual countries at the latest date for which data are available is as follows:

Great Britain.—In summarizing the employment situation in February, the Ministry of Labor Gazette states that—

After the settlement of the railway dispute, on January 29, employment quickly recovered from the decline caused by the shortage of transport, and there was a further and continuous improvement during February. Employment was good in the coal-mining industry, and in the tiuplate, steel-sheet, carpet, jute, and coach-building trades; it was fairly good with skilled operatives (except painters) in the building trades, with mill sawyers, and in certain sections of the metal trades; and fair with brickmakers, coopers, and in some branches of the leather and clothing trades. In most of the other large industries it was still slack or bad.

Among members of trade-unions from which returns were received, the percentage of unemployed was 8.6 at the end of February, 1924, compared with 8.9 at the end of January, 1924, and with 13.1 at the end of February, 1923. Among workpeople covered by the unemployment insurance acts, numbering approximately 11,500,000, and working in practically every industry except agriculture and private domestic service, the percentage unemployed on February 25, 1924, was 10.7, compared with 11.9 in January, 1924, and 12.2 at the end of February, 1923. * * * The number of workpeople on the live registers of the employment exchanges on February 25, 1924, was approximately 1,156,000 of whom men numbered 858,000 and women 227,000, the remainder being boys and girls. The corresponding number for January 21, 1924, was 1,253,000 of whom 925,000 were men and 248,000 were women.

The American trade commissioner at London reports under date of March 11, 1924 (Commerce Reports, April 7, 1924, p. 69), that—

British business in 1923 showed a 7 per cent improvement over that of 1922, judging from the annual reports of 73 corporations. The improvement in fact has been continuous since the autumn of 1922. Fundamentally conditions were on the mend throughout the year [1923]. The moderate advance of 7 per cent is far more healthy than the violent upward movement of 1919. This was followed by a reaction, whereas last year's progress was rather slow but sure. So much care has been exercised by the banks, the Government, and industry in general to prevent any new tendency to inflation that there is little reason to believe that the forward movement will be either greatly accelerated or retarded. The Labor Party has disavowed any purpose of introducing radical legislation and business interests are encouraged. Unemployment is steadily diminishing and the general sentiment is optimistic, though there is always the cautious reserve against "strikes and acts of God."

Germany.—Beginning with February there has been a decided improvement in the employment situation. The progressive slump which set in in September, 1923, and continued until January 15, 1924, when the number of totally unemployed who received unemployment donations had reached the unprecedented figure of 1,582,852, seems to have come to a stop in February. The Reichsarbeitsblatt, the official bulletin of the Federal Ministry of Labor, in its issue of March 16, 1924, summarizes the situation as follows:

On the whole, the condition of German industry has continued to improve somewhat during February and the first days of March. Sales for export do not yet indicate any great improvement. The domestic purchasing power, after having been at a low level for a long time, has, in most branches of industry,

moderately increased but that of agriculture has rather decreased and the purchasing power of salaried employees has remained at the same level as before. The increase in domestic purchasing power manifested itself in the orders of merchants, who, giving orders for quick delivery, are replenishing their stocks which had become considerably depleted during the last few months. In many instances, also, manufacturers and merchants had to resort to forced sales at reduced prices in order to obtain funds. Expansion of production is seriously hampered by difficulties in obtaining the required credits. Deposits of rentenmarks in the banks remain far behind the demand for credits. The high rates of interest which industrialists have to pay make it very difficult for them to grant long-term credit to their customers.

The most recent available employment statistics are those published in the March 1, 1924, issue of the *Reichsarbeitsblatt*, which cover the month of January. Almost all of these statistics reflect an unmistakable improvement in the labor market. The indications were particularly clear in those branches of industry which manufacture directly for the home market, such as the clothing, food, beverage, and tobacco industries. The improvement of the labor market was due to the stabilization of the currency and to the simultaneous fall in prices. On the other hand, in those branches of industry which produce largely for export trade and in a lesser measure for the home market, the limited credit facilities and the reduced opportunities of export appeared to have exercised an adverse effect upon the labor market.

Returns relating to unemployment among trade-union numbers show an improvement—for the first time since August, 1923. Only a few of the reporting federations, notably the building trades federation, report a further increase of unemployment. On January 26, of 4,365,132 trade-union members covered by the returns relating to unemployment, 1,158,586, or 26.5 per cent, were unemployed, as against 28.2 per cent at the end of the previous month and 4.2 per cent in January, 1923. These figures relate to members wholly unemployed. In addition, returns from trade-unions show that of 3,800,000 covered by returns, 1,135,400, or 29.9 per cent, were working short time, as compared with 42 per cent in the preceding month, and 12.6 per cent in January, 1923.

The number of totally unemployed persons in receipt of unemployment doles fell from 1,582,852 on January 15 to 1,430,838 on February 1 and to 1,302,270 on February 15. At the latest date 257,840 short-time workers were also in receipt of doles. In spite of this decrease in some large cities (Berlin, Stettin, Fürth, and Hanover) 50 out of every 1,000 persons of the population were in receipt of unemployment doles. The above data on persons receiving unemployment doles do not include figures for the occupied districts of Germany.

Returns from employment exchanges indicate a substantial improvement, especially with respect to the number of vacant positions offered by employers and the number of persons placed. The number of vacancies increased from 274,127 in December to 387,007 in January. Similarly, the number of persons placed increased from 225,014 to 324,140. The returns as to the number of applicants for work on the live register of exchanges are incomplete, some districts not having yet reported. So far as they go, the total fell from 2,580,000 in December to 2,380,000 in January, there being on an average, 871 applications for every 100 vacancies for men and 301 for each 100 for women. In December the corresponding figures were 1,282 and 495, respectively.

According to the monthly returns by sick funds, the number of members paying contributions (and therefore assumed to be working) showed a further reduction. The 4,062 sick funds reporting which had a total paying membership of 9,321,949 on January 1, 1924, on February 1, 1924, had 9,176,280, a decline of 1.6 per cent. Since, however, employers are rather tardy in reporting to the funds the employment and discharge of workers, the membership statistics of the sick funds lag somewhat behind the actual situation of the labor market.

France.—Unemployment in France continues to be negligible. The latest returns as to the state of employment show that on March 20, 1924, only 981 persons were in receipt of unemployment benefits from departmental and municipal unemployment funds. It should be noted that in March, 1921, when France was in the throes of an economic crisis, the number of persons in receipt of unemployment benefit was 91,225. By January, 1922, this number had fallen to 10,071, and by January, 1923, to 2,674, and according to the most recent statistics it has dropped to 981.

The reports of public employment exchanges also indicate a slight decrease in the number of applicants for work. During the week ending March 15, 1924, their number was 10,916, as against 11,300 during the preceding week.

According to a cable from the American commercial attaché at Paris dated March 10, 1924 (Commerce Reports, March 17, 1924, p. 688), the depreciation of the franc is affecting French business favorably. In January production of coal and lignite showed an increase of 400,000 tons over the preceding month, and imports decreased, largely on account of reduced receipts of British coal. During February the number of blast furnaces in operation increased from 125 to 134. The production of pig iron and of crude steel reached record figures in January, being the highest since the armistice. Most producers' books are filled with orders for three months ahead, and there are almost no available stocks of semifinished products. The machine-tool business is prosperous, and automobile manufacturers are working to capacity. The chemical industry is active. Shoe manufacturers have good orders ahead, including large export sales. The labor situation was characterized by numerous local strikes. An increase in labor unrest is expected as living costs continue to advance. Employers are urging a further modification of the eight-hour law.

Belgium.—The latest figures available on unemployment relate to January but are provisional only. Returns received by the Ministry of Industry and Labor from 1,530 approved unemployment funds, with a total membership of 631,622, show that 23,669 members were either totally or partially unemployed at the end of the month. The total days lost through unemployment in January numbered 310,763, or 2.05 per cent of the aggregate possible working days; in the preceding month the percentage was 1.35, and in January, 1923, 1.96.

During January, 15,829 applications for employment were received at employment exchanges, as compared with 13,335 in the preceding month. Vacancies notified by employers in January numbered 9,950, as against 8,979 in December. There were thus on an aver-

age 159 applicants for each 100 situations registered as vacant as compared with 149 in the preceding month.

A cable from the American commercial attaché at Brussels, dated March 14, 1924 (Commerce Reports, March 24, 1924, p. 753), states that the fluctuations in exchange have disturbed the Belgian markets.

The metal market, although strengthened at the beginning of February by the decline in the franc and continued absence of competition from Lorraine and Luxemburg, was subsequently disorganized by sharp exchange fluctuations, with the result that buyers refrained from placing contracts and producers quoted only with reluctance. Belgian producers are apprehensive that German forges will enter the market at sacrifice prices, as Ruhr plants are generally reported as not having enough forward orders to assure one month's operation. Belgian plants are all booked to June and some even into July.

The position of textile producers remains strong in spite of labor unrest due to higher living costs. Linen weavers are heavily engaged and generally refusing additional orders. The domestic cotton business is hampered by fluctuations.

The position of plate and window glass producers is secure, with sustained British and American purchases of plate glass and a large demand from South America and the Orient for Belgian window glass.

Netherlands.—A cable from the American commercial attaché at Brussels (Commerce Reports, March 3, 1924, p. 552) states that the registered unemployed in the Netherlands numbered 106,206 on February 1 as compared with 102,225 on January 1. There was a slight improvement in the building and metal-working trades, but the conditions in the clothing industry and among office help were worse, while increased unemployment was most marked in the case of casual unskilled labor. There is no visible change in prospect in the textile lockout, as both employers and operatives refuse to make concessions. As the strike funds of the union organizations are running low, many strikers are dependent on municipal doles. The contest hinges on the eight-hour bill, and it is feared that a long-continued strike will result in the exclusion of the Dutch manufacturers from markets which so far have been retained.

A later cable from the same source (Commerce Reports, March 24, 1924, p. 757) states that unemployment began to show a decrease by the middle of February, dropping to 98,718 as compared with 106,206 on February 1. The number of unemployed in the building trades and in the mechanical construction trades declined by more than 3,000, to 26,400 in each group. The continuation of the textile lockout is resulting in a considerable emigration to German frontier textile enterprises, especially to Gronau, where the mills are working at capacity.

Switzerland.—Unemployment in Switzerland decreased slightly during February in accordance with the usual improvement of the labor market at that time of the year. The number of totally unemployed at the end of February was 27,120, or 1,360 less than at the end of January. The industry and occupational groups showing a decrease in unemployment of more than 100 persons at the end of February were: Unskilled workers (510); building trades, manufacture of building material, and painting (481); agriculture and gardening (202); and domestic service (174). An increase in unemployment took place in the case of employees of hotels and restaurants (352); commerce and administration (112); the professions (56); and the chemical industry (32).

The number of short-time workers decreased from 12,661 in January to 11,985 in February. The greatest decreases in the number of short-time workers took place in the metal, machinery, and electrical industry group (293); clothing and leather industries (186); watch and jewelry industry (181); food and tobacco industries (168); and among unskilled workers (109). A considerable increase in short-time work was reported by the textile industry (318).

A total of 6,174 unemployed persons were given temporary employment on emergency relief works in February. Since these were counted as totally unemployed, the number of actually unemployed was only 20,946. Of this number, 5,135 received unemployment donations.

Italy.—The latest unemployment statistics published by the National Employment Office cover the month of December, 1923. They show that on December 31, 1923, the number of totally unemployed was 258,580 (199,952 men and 58,628 women), as against 225,093 on November 30, 1923, an increase of 33,487, or 14.87 per cent. Of the totally unemployed 34,608 received unemployment benefits from the Government, as compared with 33,023 in November, 1923. As in preceding months the districts of Emilia, Venice, Lombardy, Piedmont, Liguria, Campania, and Toscana, all northern and central districts, account for the great majority of the unemployed.

The industry groups chiefly affected by unemployment were agriculture (76,033); mining, building, and construction (65,616); metal-working industries (32,296); clerical workers (18,535); public utilities (18,360); food industries (15,770); and the textile industries (13,776).

A cable from the American commercial attaché at Rome, dated March 1, 1924 (Commerce Reports, March 10, 1924, p. 622), states that the number of unemployed had increased to 281,000 on January 31, 1924.

Denmark.—According to a cable from the American commercial attaché at Copenhagen, dated March 13, 1924 (Commerce Reports, March 24, 1924, p. 755), unemployment in Denmark rose to 57,600 in the first week of March, as against 55,400 early in February and 59,500 in March, 1923. By March 12, however, the number of unemployed had declined to 57,300, and it is believed that from now on there will be a gradual decrease in unemployment, as the severe winter is in part responsible for the large number.

Norway.—A report from the American consulate at Christiania, dated March 5, 1924, states that according to returns made by municipal employment offices the number of unemployed in Norway on February 10, 1924, excluding 3,295 persons employed at emergency relief works, was 12,620 (11,256 men and 1,364 women). If the usual 60 per cent are added to this figure so as to include communities without employment offices, the total number of involuntary unemployed persons, exclusive of persons employed at emergency relief works, was about 19,000 on February 10, 1924, as compared with 18,750 on January 10, 1924, and 28,000 on February 16, 1923.

Statistics as to unemployment among trade-union members are available for December, 1923. According to returns made by certain trade-unions to the Norwegian Central Bureau of Statistics 10.1 per cent of the members of these unions were unemployed on December

31, 1923, as against 8.5 per cent on November 30, 1923, and 12.9 per cent on December 31, 1922. On December 31, 1923, the heaviest unemployment prevailed among carpenters (24.1 per cent), bricklayers and masons (15.4 per cent), shoemakers (11.7 per cent), bakers (11 per cent), and metal workers (10.9 per cent).

A cable from the American commercial attaché at Copenhagen, dated March 13, 1924 (Commerce Reports, March 24, 1924, p. 756), calls attention to the fact that the ranks of unemployed in Norway are greatly augmented by strikers and locked-out workers, and that labor conflicts continue to be the chief stumbling block to improvement in the Norwegian economic situation. Most industries have ceased operations on account of the labor conflicts, and activity in those lines not involved in the disputes is also affected. While the match and cement industries continue operation, the wages agreements in both instances expire during March. Very favorable conditions in the fish-canning industry are, however, reported, there being a plentiful supply of raw materials at reasonable prices.

Sweden.—According to the report of the unemployment commission, unemployment in Sweden during January, 1924, increased by 500, for on February 1, 1924, there were reported 16,600 unemployed, as compared with 16,100 on January 1. Of the 16,600 unemployed, 11,300 were in the cities and 5,300 in rural districts. Only 80 women were among the unemployed. The industries among which there were the largest number of unemployed were: Metal and machinery industry, 3,001; mining, 1,522; stone and glass industry, 1,937; building construction work, 1,292; handicrafts and specialty industries, 1,398; woodworking industry, 753; and agriculture and forestry, 842.

State aid to unemployed is now being given only in the form of employment on relief works, which was provided for 2,329 persons on February 1, 1924, as compared with 1,566 on January 1 and 3,273 on December 1, 1923. Relief work is also provided by communes and municipalities, the number of unemployed given such work on February 1, 1924, being 2,459, as compared with 1,319 on January 1, 1924, and 1,127 on December 1, 1923. During January, 1924, the Government expended on relief construction operations the sum of 631,316 kronor.¹ The Government expense during the year 1923 for unemployment doles and relief works combined totaled 29,096,650 kronor.

Trade-unions with an aggregate membership of 132,671 reported 18,533, or 14 per cent, unemployed on the last day of December, 1923, as compared with 9.3 per cent on November 30, 1923, and with 21.3 per cent on December 31, 1922.

Finland.—The Bank of Finland Monthly Bulletin gives the number of registered unemployed as 1,615 on January 31, 1924, as compared with 779 at the end of December, 1923, and 2,253 at the end of January, 1923. In spite of the reported increase of unemployment however, the bulletin states that the state of the labor market continues good in every respect.

Poland.—In an article on unemployment in Poland the International Labor Office at Geneva (Industrial and Labor Information, March 10, 1924, p. 24) states that one of the results of the reorganization of national finance undertaken by the Polish Government, and especially the discontinuance of the issuance of paper

¹ Krona at par=26.8 cents. Exchange rate varies.

money from the beginning of February, has been the development of serious unemployment.

Of all industries the Lodz textile industry is the most affected. The municipal statistical office published the following information on the extent of employment among textile workers: At the beginning of February, 1924, there were employed in Lodz textile mills 88,353 workers who worked from 2 to 6 days per week. Only 8.2 per cent of these workers worked 6 days per week, 2 per cent worked 5 days, 12.5 per cent worked 4 days, and 77.3 per cent worked 2 or 3 days per week. There were also 165 workers employed one day per week, and the trade-unions announced 4,227 totally unemployed in the industry.

The Posnan Prawda of February 6, 1924, gives the following information regarding other branches of industry: Twenty-one factories are closed down and 4,000 unemployed in the glass industry; seven out of nine cement works are shut down, while brick and tile works have not reopened although the building season begins shortly; in the metal and chemical industries 40 per cent of the workers are idle; the mines of Upper Silesia are working only four hours a day.

Austria.—The official Austrian unemployment statistics which had already shown a heavy increase in December in the number of totally unemployed persons receiving Government subsidies indicate a further increase by 21,736 at the end of January, 1924. The number of unemployed receiving Government doles was 119,309 at the end of January, 1924, as against 97,573 at the end of the preceding month.

A cable from the American trade commissioner at Vienna, dated March 19, 1924 (Commerce Reports, March 31, 1924, p. 819), states that the official estimate of the unemployed receiving Government support at the end of February, 1924, was 127,000, or nearly double the number of unemployed (75,810) in November, 1923, which indicates the severity with which industry has been affected by the money stringency and business depression since that time.

Czechoslovakia.—The official statistics of the Czecho-Slovak Ministry of Social Welfare show that 57,900 unemployed persons, with 60,000 family dependents, received unemployment doles directly from the Government. To this number should be added 34,000 short-time workers who received subsidies from the enterprises employing them. While these statistics indicate that unemployment in Czechoslovakia has remained stationary since October, 1923, it should be kept in mind that the above figures do not, of course, include all the totally unemployed persons or short-time workers but refer only to those persons who have applied for unemployment relief.

A cable from the American commercial attaché at Prague, dated February 29, 1924 (Commerce Reports, March 10, 1924, p. 624), states that during February Czecho-Slovak industry and trade were generally good, and that there was some revival of the timber trade, especially with Germany. Favorable conditions continued in the cotton and woolen mills. The linen mills were more active. The metal industries are now operating at about 60 per cent of capacity, due to the effect of French and Belgian competition.

The American consul at Prague reports that labor conditions remain unchanged, with the exception of a growing spirit of unrest in the textile and the iron and steel industries. Lockouts occurred in

February in many of the textile factories of northern Bohemia, and strikes and lockouts occurred in the steel works at Podmokly (Bodenbach).

Canada.—The Dominion Bureau of Statistics reviews the March employment situation as follows:

On the whole, practically no change in the situation since the preceding month was reported by employers at the beginning of March; the index number stood at 90.7 as compared with 90.6 on February 1. On the same date of 1923 the index was 89.9, in 1922, 81.9, and in 1921, 88. * * *

The Dominion Bureau of Statistics tabulated returns from 5,886 firms employing 748,537 persons on March 1. Manufacturing as a whole reported improvement; communication, metallic ore mining, shipping and stevedoring, highway and railway construction also afforded increased employment, but logging showed seasonal declines; coal mining, steam railway transportation and building construction recorded further curtailment of operations.

An analysis of the returns by Provinces shows that employment in Quebec and British Columbia reported expansion, while in the remaining Provinces the tendency was downward. In the maritime Provinces the greatest losses occurred in coal mining and logging, but rolling mills were decidedly busier and steam railways afforded increased employment. In Quebec manufacturing showed considerable improvement and railway construction employed a larger number of men than at the beginning of February. On the other hand, logging and building construction were decidedly slacker. Varying tendencies in different divisions in Ontario resulted in a decline of 0.5 per cent. Iron and steel and several other branches of manufacturing were more fully employed; communication and railway construction also recorded larger working forces. On the other hand, textile factories, logging camps, and steam railways reported the release of large numbers of workers. Contraction in three industries principally caused the decline in the prairie Provinces—coal mining, railway transportation, and construction. In British Columbia there was an increase in employment of 4.6 per cent, of which the greater part was recorded in logging, shipping and stevedoring, highway and railway construction and maintenance.

A review of the returns by industries shows that in the manufacturing division employers increased their staffs "by practically 4,000 workers, or 1 per cent. Sawmills, furniture, wooden vehicle, sugar, confectionery, rubber, rolling, forging, agriculture implement, automobile, steel shipbuilding, heating appliance, structural iron, sheet metal, lead, tin, zinc and copper works reported considerable expansion. On the other hand, musical instrument, garment, cloth, tobacco, brewing, and electric-current plants employed smaller pay rolls than at the beginning of February." The logging industry showed considerable curtailment of a seasonal character, in which all Provinces except British Columbia shared. Employment in coal mining in the prairie and maritime Provinces was reduced, repeating the movement indicated at the same time of last year. Other branches of mining showed moderate improvement. Steam railway operations in Ontario and the prairie Provinces showed substantial decreases; shipping and stevedoring in British Columbia were more active than in the preceding month. There were large losses in building construction, but moderate increases in highway and railway construction and maintenance. Trade, both wholesale and retail, afforded slightly less employment.

A summary of the latest statistical reports on unemployment abroad is given in the table following:

SUMMARY OF LATEST REPORTS ON UNEMPLOYMENT IN FOREIGN COUNTRIES

Country	Date	Number or per cent unemployed	Source of data	Remarks
Great Britain and northern Ireland.	Feb 25, 1924	1,226,594 (number of unemployment books lodged), representing 10.7 per cent of all persons insured against unemployment.	Ministry of Labor Gazette, London, March, 1924.	Of the 1,226,594 persons who lodged their unemployment books, 944,806 were males, and 281,788 were females. The per cent of unemployed workers on Jan. 28, 1924, was 11.9, and 12.2 on Feb. 26, 1923.
Do.....	Feb. 20, 1924	8.6 per cent of trade-union members.....	.....do.....	The corresponding per cent at the end of January, 1924, was 8.9, and 13.1 at the end of February, 1923.
Germany.....	Feb. 15, 1924	1,302,270 totally unemployed persons receiving unemployment donations. ¹	Reichsarbeitsblatt, Berlin, Mar. 1, 1924.	257,840 persons were working short time. ¹ On Jan. 15, 1924, the number of totally unemployed was 1,582,852 and that of short-time workers 635,839.
Do.....	Jan. 26, 1924	26.5 per cent of trade-union members.....	.....do.....	The corresponding per cent at the end of the last week of December, 1924, was 28.2 and 4.2 at the end of the last week of January, 1923.
France.....	Mar. 20, 1924	981 persons in receipt of unemployment benefits from departmental and municipal unemployment funds.	Bulletin du Marché du Travail, Paris, Mar. 21, 1924.	Of the 981 persons in receipt of unemployment benefits, 780 were males, and 201 were females. At the end of the preceding week the number of persons receiving unemployment benefits was 1,017.
Do.....	Mar. 15, 1924	10,916 persons on live register of public employment exchanges.	.....do.....	Of the 10,916 persons on the live register of employment exchanges, 7,348 were men, and 3,568 were women. At the end of the preceding week the corresponding total was 11,300.
Belgium.....	Jan. 31, 1924	23,669 out of 631,622 members of unemployment funds were either wholly unemployed or on short time. ¹	Ministry of Labor Gazette, London, March, 1924.	The corresponding number at the end of December, 1923, was 23,567. The aggregate days of unemployment in January, 1924, numbered 310,763, or 2.06 per cent of the aggregate possible working days, as against 1.35 per cent in December, 1923, and 1.96 per cent in January, 1923.
Do.....	Jan. —, 1924	15,829 applicants for employment registered at public employment exchanges.	.....do.....	The corresponding number in December, 1923, was 13,335.
The Netherlands.....	Feb. 9, 1924	35,462 members of unemployment funds, or 13.8 per cent of the total membership, were totally unemployed, and 8,111, or 2.9 per cent, partially so.	.....do.....	In the corresponding week of the preceding month the percentages were 20.3 and 3.6, respectively, and in the week ended Feb. 10, 1923, 12.5 and 2.9.
Do.....	Jan. —, 1924	132,840 applicants for employment at public employment offices.	Maandschrift, The Hague, Feb. 29, 1924.	The corresponding number for December, 1923, was 131,034 and 127,818 for January, 1923.
Switzerland.....	Feb. 20, 1924	27,120 totally unemployed (including 6,174 employed on relief works); 11,985 short-time workers.	Der Schweizerische Arbeitsmarkt, Bern, Mar. 15, 1924.	The corresponding figures for Jan. 31, 1924, were 28,480 totally unemployed (including 6,730 employed on relief works), and 12,661 short-time workers.
Do.....	.....do.....	5,135 persons received unemployed donations.	.....do.....	The corresponding number on Jan. 31, 1924, was 4,946.
Italy.....	Dec. 31, 1923	238,580 totally unemployed persons.....	La Disoccupazione in Italia, Rome, Dec. 31, 1923.	The corresponding figure for November, 1923, was 225,083.
Do.....	.....do.....	34,608 unemployed persons received unemployment benefits.	.....do.....	The corresponding figure for November, 1923, was 33,023.
Denmark.....	Feb. 20, 1924	57,600 unemployed persons.....	Report of the American Consulate at Copenhagen, dated Feb. 29, 1924.	The corresponding figure for the last day of January, 1924, was 56,346, and 63,200 for the last day of February, 1923.

¹ Provisional figures

SUMMARY OF LATEST REPORTS ON UNEMPLOYMENT IN FOREIGN COUNTRIES—Concluded

Country	Date	Number or per cent unemployed	Source of data	Remarks
Denmark	Jan. 25, 1924	21 per cent out of a total of 256,509 workers covered by returns of the trade-unions and of the Central Employment Exchange were unemployed.	Statistiske Efterretninger, Copenhagen, Feb. 23, 1924.	The corresponding per cent at the end of the last week of December, 1923, was 16, and 21.5 at the end of the last week of January, 1924.
Norway	Feb. 10, 1924	19,000 totally unemployed persons.	Report of the American Consulate at Christiania, dated Mar. 5, 1924.	The corresponding figure at the end of January, 1924, was 19,800, and 27,200 at the end of February, 1923.
Do.	Dec. 31, 1923	10.1 per cent of trade-union members.	Ministry of Labor Gazette, London, March, 1924.	The corresponding per cent at the end of November, 1923, was 8.5, and 12.9 at the end of December, 1922.
Sweden	Feb. 1, 1924	16,600 unemployed (report of State Unemployment Commission).	Report of the American Consulate at Stockholm, dated Mar. 8, 1924.	The corresponding figure for Jan. 1, 1924, was 16,100.
Do.	Dec. 31, 1923	14 per cent of trade-union members.	Sociala Meddelanden, Stockholm, No. 2, 1924.	The corresponding per cent on Nov. 30, 1923, was 9.3, and 21.3 on Dec. 31, 1922.
Finland	Jan. 31, 1924	1,615 unemployed (1,070 men and 545 women) registered at communal employment offices.	Bank of Finland Monthly Bulletin Helsinki, February, 1924.	At the end of December, 1923, the number of unemployed was 779, and 2,253 at the end of January, 1923.
Poland	Nov. 30, 1923	61,767 unemployed persons.	League of Nations, Monthly Bulletin of Statistics, Geneva, February, 1924.	The corresponding number in October, 1923, was 54,923, and 75,000 in December, 1922.
Austria	Jan. 31, 1924	119,309 unemployed persons in receipt of unemployment donations.	Statistische Nachrichten, Vienna, Feb. 25, 1924.	The corresponding figure for the end of December, 1923, was 97,573.
Czechoslovakia	Jan. —, 1924	57,900 totally unemployed persons received unemployment doles from the Government and 34,000 short-time workers received subsidies from their employers.	Report of the American Consulate at Prague, dated Mar. 6, 1924.	
Canada	Feb. 1, 1924	7.5 per cent of trade-union members	Labor Gazette, Ottawa, March, 1924.	The corresponding per cent on Jan. 1, 1924, was 7.2, and 7.8 on Feb. 1, 1923.

Activities of Special Bureau for Relief Work for Women in Finland, 1918 to 1923¹

UNEMPLOYMENT among men in Finland after the revolution was of little significance, but thousands of women had become the heads of families and unemployment among them became serious.

In July, 1918, a special bureau for relief work for women was established to follow the trend of unemployment among women, take the initiative for relief measures, supervise the relief work, and work with the employment agencies.

Attempts to have the farmers engage workers through the relief bureau failed. An appeal to the industrial establishments brought better results, but it was felt that so-called "relief works" would be of the most importance.

Several cities established workrooms in which the women sewed, etc. Following an appeal made by the relief bureau because of the extreme difficulties experienced in obtaining materials and orders for work, the defense service gave out the making of underwear, etc., as so-called "reserve work." This work was done partly in the city workrooms and partly by private concerns which were thus enabled to keep their workers employed. In order to insure the workers an adequate wage, minimum wage rates were agreed upon.

The workshops suffered considerable losses because private concerns reduced their bids. In order to insure the workers some earnings it became necessary to specialize the work. This, however, made it difficult for the worker to obtain employment outside the workroom, as she became skilled only in one particular detail of the work.

During 1918-19 the number of women employed in workrooms under direct supervision of the relief bureau, not including those to which materials only were supplied, rose from 1,500 to 2,500. In 1919, at the request of the American Relief Administration, about 30,000 children's dresses were made, the work being distributed in several cities. This work was a great help to the relief bureau, furnishing employment to many applicants.

As experiments proved that tailoring done in workrooms would pay, they began making uniforms, etc. During the last two years clothes have also been made for refugees. In some communes work was done for hospitals, children's homes, and municipal institutions.

As the labor market improved the number of workrooms decreased, only those in the larger seaports with seasonal unemployment being kept.

The relief bureau has paid particular attention to vocational education for unemployed women. During 1920 and 1921 the bureau was granted 109,500 marks² for trade courses; with this money it also assisted the communes with their trade courses, the communes furnishing heat, light, and rooms and the State paying one-half the other expenditures.

In accordance with the relief bureau's proposal of October 19, 1921, funds were appropriated and a home for woman refugees was

¹ Finland. Socialministeriet. Social Tidskrift, No. 11, Helsingfors, 1923.

² Finnish mark at par=19.3 cents. Exchange rate varies.

established at Viborg; this was later moved to Kellomäki and was abolished in May, 1923. On an average, from March to December, 1922, there were about 30 persons in the home at one time.

In December, 1920, when the American Relief Administration's committee for the relief of Finland's children ceased operations 650,000 marks were turned over to the bureau.

Reduction of German State Railroad Staff¹

COMMENTING on the reduction of the staff of German State railroads now in process, *Vorwärts*, a Berlin daily, says:

While before the war about 60 per cent of the expenditures in the budget of the former Prussian-Hessian Railroad Administration went for salaries and wages and only 40 per cent for materials, locomotives, cars, construction, etc., to-day about 84 per cent of the total expenditures of the German State railroads find their way into the pockets of the large industries and only 16 per cent are disbursed for salaries and wages. Either the railroad administration is being grossly overcharged by contractors who furnish supplies to it or the German public is being willfully deceived when told that the railroads are greatly overmanned so that the extensive artificially created unemployment may be augmented through personnel reduction by the railroads and the so-called "industrial reserve army" of the unemployed be further swelled for purposes of wage reduction and lengthening of the hours of labor.

Experts familiar with the railroad budget claim that the State railroads have for years been shamelessly exploited by industry. * * * A small reduction in prices would relieve the finances of the State railroads much more effectively than the discharge of about 35 per cent of the low-salaried employees which is now in process. The higher officials are, of course, being left in their jobs. Although under pressure from its creditors and contractors the railroad administration is discharging over one-third of its staff, it achieves a saving of merely 1 or 2 per cent of its total expenditures, but at the same time it imperils the safe operation of the railroads.

English Attitude Toward Unemployment Insurance and Study of Unemployed Claiming Benefits

Changes in Administration of Unemployment Insurance Plan

SINCE the opening of the new Parliament on February 12, 1924, two changes have been made in the administration of the unemployment insurance act, which, from the standpoint of the insured, have made it much more valuable; the "gap" has been abolished, and certain restrictions upon the payment of "uncovenanted benefit" have been swept away.

The "gap" was an interval of varying length between periods of payment of "uncovenanted benefit." Under the terms of the original insurance act, the unemployed worker must have paid in at least 20 contributions to the insurance fund within a specified period preceding the receipt of benefit. The prolonged and widespread depression which followed 1920 made it impossible for large numbers of workers, otherwise eligible, to meet this requirement, and the terms of the act were extended to permit the payment of "uncovenanted benefits," i. e., benefits for which the recipient had qualified

¹ *Vorwärts*, Berlin, Jan. 11, 1924. Morning edition.

in all respects except the payment of a specified number of contributions. These benefits, however, could not be paid continuously throughout the whole period for which they might be drawn. For the year ending in October, 1924, for instance, uncovenanted benefit might be paid for as much as 26 weeks, if necessary, but after 12 weeks of payments there must be a gap of at least three weeks before the recipient could draw anything more. This provision was justified by former Governments on the ground that it acted as a deterrent. It was, however, a cause of much complaint among the unemployed, who during the interval were obliged either to seek relief from the poor-law authorities or to get on as best they could without help of any kind. In earlier years the gaps had been more frequent and longer, but the workers contended that the shortening of the interval merely diminished the suffering and injury, that the whole principle was wrong, and that there was no justification for the practice.

On February 13 the new Minister of Labor introduced a bill to abolish the gap and permit continuous payment of the uncovenanted benefit. He explained that the Government hoped to revise the whole insurance act, making important changes, but that this brief act was introduced at once in order to prevent the suspension of payments which would soon be necessary, inasmuch as another gap was about to occur. The bill was to become effective as of February 21. It passed its successive readings with little opposition and became a law February 19. It is estimated that the change will involve an additional payment from the insurance fund for the year ending October, 1924, of some £600,000.¹

Apart from the gap, former ministers of labor had attached special conditions to the receipt of uncovenanted benefit, with a view to limiting the number receiving it, and these conditions had roused much bitterness of feeling, especially among women, who felt that the restrictions were applied with special harshness to them. Uncovenanted benefit, it was provided, was to be refused to those, otherwise eligible, who fell within any of the following classes:

Single persons residing with parents or relatives to whom they could reasonably look for support during unemployment.

Married women living with their husbands who are in employment and whose incomings are sufficient to justify the withholding of uncovenanted benefit from the wife.

Married men living with their wives where the circumstances are as in the last paragraph.

Persons working short time whose incomings are sufficient to justify the withholding of uncovenanted benefit.

Certain classes of aliens.

Persons who are unwilling to accept on fair terms and conditions work other than that to which they are accustomed, but which they are reasonably capable of performing.²

Early in March the new Minister of Labor issued a circular of instructions to local committees and others having to do with the administration of unemployment insurance, abolishing these conditions except the last. He points out that by the terms of the act an applicant for unemployment benefits must prove, first, that he is normally employed in an insurable trade; second, that he is seeking, but is genuinely unable to obtain, full-time employment; and, third,

¹ Pound sterling at par = \$4.8665. Exchange rate varies.

² Manchester Guardian, Mar. 10, 1924, p. 19.

either that he has paid in at some time 20 contributions to the unemployment fund, or that, taking into consideration the opportunities for employment in his normal occupation, he has since the beginning of 1920 been employed for a reasonable length of time in an occupation which is now insurable. The minister holds that these requirements go as far in safeguarding the fund as can be justified on the ground of public interests.

As a result of a full consideration of all the circumstances, the minister has come to the conclusion that the special restrictions which have been applied to the classes now in question can not be justified. He is of opinion that while the discretion vested in him not to pay uncovenanted benefit unless it is expedient in the public interest to do so should be used to rule out individuals whose records show that they are not in any case proper subjects for the grant of benefit under an insurance scheme, his discretion should not be used to refuse benefit to those individuals who are normally insurable workers, who satisfy the committees that they are genuine seekers for work, but who happen to have relatives who can support them. The mere fact that a claimant may have some private resources of his own or from relatives should not be in itself a ground for refusing benefit.²

The same reasoning, the minister holds, applies to aliens, who, as long as they are otherwise eligible for uncovenanted benefit, should not be refused on the mere ground of nationality.

In answer to a question in Parliament as to the cost of thus extending the uncovenanted benefit, the minister said that it was estimated at between £2,000,000 and £4,000,000.

Attitude of Employers

IN 1922 the Minister of Labor issued a memorandum³ addressed to the National Confederation of Employers' Organizations and to the Trades-Union Congress General Council, asking the cooperation of these bodies in considering steps which might be taken to improve the system of national unemployment insurance. In particular, he suggested a consideration of the advisability of a scheme of insurance by industry. The act of 1920 had provided that any industry might, if a certain proportion of those engaged in it agreed upon such a move, contract out of the national insurance plan and establish a scheme covering only that industry. The widespread unemployment which began in the fall of 1920 led to the passage of a new act in 1921, under which this provision was temporarily suspended. The Minister of Labor, however, wished to place it before employers and employed for consideration, and proposed several alternative plans, which, he said, were put forward to draw attention to two main objects:

1. To link up together as closely as possible the financial responsibility for paying benefit with the responsibility of finding employment, so as to give the greatest possible incentive for the reduction of unemployment.

2. To give a full opportunity to industries (or smaller units) of providing for their own unemployment in the hope that, at any rate in the case of industries with average or less than average risks, it will be possible to secure (without any diminution of reasonable contributions from the State) additional advantages for the worker.

According to the Ministry of Labor Gazette for February, 1924 (p. 40), a reply to this memorandum has recently been received from the National Confederation of Employers' Organizations, stating

² Manchester Guardian, Mar. 10, 1924, p. 19.

³ See MONTHLY LABOR REVIEW, February, 1923, p. 241.

that while they consider that the principle of unemployment insurance has been proved workable, they do not approve of the idea of insurance by separate industries. On the ground of economy, they say, it is almost self-evident that one general and uniform scheme administered by a single body involves less expense than the administration of a number of different schemes, varying in details and handled by different bodies. Apart from this, they doubt whether such a scheme would prove workable, and they disapprove of it on principle.

They further consider that compulsory insurance by industries is, in any event, quite impracticable on any comprehensive scale, owing to demarcation difficulties between industries, movements from industry to industry, absence of organization in certain cases, and the position of seasonal and casual workers.

From the financial point of view it would not be practicable for even every well-organized industry to have a workable scheme. The industries which depend upon world markets suffer severer fluctuations than home trades. An industry having severe trade fluctuations could not offer the advantages given in an industry with low fluctuations. Disparity between contributions or benefits would create unrest.

The segregation of industries has, in addition, grave objection on the ground of general principle. Insurance is founded upon the principle of averaging. All industry is interdependent, though the incident of depression and unemployment may fall very unequally. Unemployment insurance, if it is to be compulsory, should be universal and uniform.

It will at best be a very long time before the permanent postwar situation, from the point of employment and unemployment experience, can be ascertained in most of our industries. If unemployment insurance is in the interval to be restored to its appropriate place in the social services it can only be by developing it on the national basis of the 1920 act, with such low-risk industries as there are aiding the high-risk industries.

Another idea put forward for consideration was whether contributions and benefits should be uniform or whether the higher paid workers should give higher contributions and receive higher benefits than the lower paid. The employers indorse the principle of uniformity, pointing out that it is the lack of opportunity "on the part of unskilled and lower-paid workers to make provision for themselves" that lies at the basis of the compulsory insurance plan, and that there should be no discrimination between workers.

Accepting the present plan, they point out several ways in which they think it might be amended to advantage. The State should bear a larger proportionate part of the expense, they think.

Instead of its present share of a little over one-fourth of the total contribution the State should pay the same rate as the employer and the worker when the fund is solvent. This increase should allow improvement in the direction of increasing the number of weeks in any insurance year for which benefit will be paid.

The administration of the act, they think, should be in the hands of the State only. Under the acts of 1911 and 1920 concurrent or partial administration by trade-unions was provided for, with the result that skilled men, who were naturally apt to be union men, tended to segregate themselves from the unskilled, to the detriment of the general plan.

As a result of the arrangement whereby trade-unions administered the insurance fund, skilled men were kept aloof from the employment exchanges and the development and usefulness of the exchange system was prejudiced and brought into disrepute. Both on financial grounds and in the interests of the efficiency and usefulness of the employment exchanges as the administrative machinery of the insurance fund, they should be the sole administering authority.

Study of Claimants for Unemployment Benefit

THE Ministry of Labor Gazette gives in its issue for March, 1924, a summary of the results of an inquiry made by the British Ministry of Labor into the circumstances and industrial history of nearly ten thousand of those who applied for unemployment benefit during the week ending November 10, 1923. The charge has been made that the unemployment insurance fund was being used to support numbers who were unfit to work and who should be drawing help from the poor-relief authorities, and the investigation was made in part to test the accuracy of such charges. The investigation covered 7,981 men, 252 boys, 1,617 women, and 147 girls, making a total of 9,997, which represented about 1 in 100 of those applying for unemployment benefit during the selected week. Care was taken that the group should be representative of the whole body of claimants, without bias of any kind. Personal interviews were held with each one, and the managers of the exchanges were asked to state from their knowledge or impressions of the applicants, into what group each applicant fell with regard to employability. Four categories were made as to this respect, as follows:

- (a) Persons who, in normal times, would usually be in steady employment.
- (b) Persons who, though not usually in steady employment, would, in normal times, obtain a fair amount of employment.
- (c) Persons who would not in normal times obtain a fair amount of employment, but who were not considered to be "verging on the unemployable."
- (d) Persons who were considered to be "verging on the unemployable."

With regard to the last category, it is pointed out that those included in it were not absolutely unemployable, since under the terms of the unemployment insurance act such are excluded from benefit, and that as a matter of fact there was evidence of their recent employment.

That the men and women who were placed in category (d) were not "unemployable" in the strict sense of the word was shown by their employment records, which indicated that they had had, as a class, a fair amount of recent employment.

An analysis shows that 66.3 per cent of all the males interviewed were allocated to category (a) and 89 per cent to categories (a) and (b) together; the corresponding figures for females were 73.7 per cent and 88 per cent, respectively. Only 3.5 per cent of the males, and 1.8 per cent of the females, were regarded as "verging on the unemployable." Over half of the men in this category and over a third of the women, were 60 years old or over; a heavy proportion, also, suffered from poor physique, poor health, or some manifest physical defect.

Four-fifths of the female claimants, against less than half of the male, were under 35 years of age. Lads under 19 and girls of 16 and 17 were less numerously represented among the applicants than among industrial workers generally. This is perhaps accounted for by the fact that all in these age groups reached working years after the industrial depression set in, and had little opportunity to secure work in an insured trade. About two-fifths of the men and two-thirds of the women were single. The large majority of both sexes were in good health. Facts as to training and as to dependents were brought out, as follows:

Apprenticeship and training.—Of the males, 25.9 per cent had been apprenticed, 25.3 per cent had been trained, and 48.8 per cent neither trained nor apprenticed; the corresponding figures for females were 15.3 per cent, 49.2 per cent, and 35.5 per cent. The proportion of apprenticed or trained persons was considerably

higher in category (a) than in the other categories (58.4 per cent for males and 72.2 per cent for females); there is a tendency for the best type of boys and of girls to be accepted for apprenticeship or training. In considering the high proportion of trained females, it should be remembered that "training" in the case of a woman often means something more meager or casual than in the case of a man.

Number of dependents.—Fifty-seven and one-tenth per cent of the males, but only 10.1 per cent of the females, had dependents: The average number of dependents in the case of the male claimants who had dependents was 2.7.

The proportion drawing dependents' benefit, however, were only 47.3 per cent in the case of males, and 1.5 per cent in the case of females. Of the males who were drawing dependents' benefit, 35.2 per cent were drawing benefit in respect of wife or housekeeper only, 6 per cent in respect of child or children only, and 58.8 per cent in respect of an adult, with one or more children.

Analyzed by number of children, the figures for men with dependent children were: One child, 35.9 per cent; two children, 28.8 per cent; three children, 17.1 per cent; four or more children, 18.2 per cent.

WORKERS' EDUCATION AND TRAINING

Apprenticeship on German State Railroads and in the Berlin Metal Industry

BY means of questionnaires sent annually to the 107 railroad shops which train apprentices, the administration of the German State railroads has since 1921 obtained statistics of its apprenticeship system which are of considerable administrative and technical value to it. The questionnaires are filled in as of August 1 of each year and reflect conditions on that date. The statistics compiled from these questionnaires for the years 1921 and 1922 have recently been published in summary form in the *Reichsarbeitsblatt*¹ and are in part reproduced here.

The distribution by trades of both journeymen and apprentices in the shops of the State railroads is shown in the table following:

DISTRIBUTION OF JOURNEYMEN AND APPRENTICES IN SHOPS OF THE GERMAN STATE RAILROADS, 1921 AND 1922, BY TRADES

Trade	Journeymen				Apprentices					
	Number		Per cent		Number		Per cent		Number per 100 journeymen	
	1921	1922	1921	1922	1921	1922	1921	1922	1921	1922
Machinists.....	56,910	50,047	59.8	58.0	12,047	8,340	91.8	88.1	21.2	16.7
Blacksmiths.....	6,744	5,994	7.1	6.9	28	35	.2	.4	.4	.6
Turners.....	6,388	5,900	6.7	6.8	320	257	2.4	2.7	5.0	4.4
Boiler makers.....	5,042	5,062	5.3	5.9	525	630	4.0	6.7	10.4	12.4
Car repairers.....	3,314	3,226	3.5	3.7	17	18	.1	.2	.5	.7
Carpenters.....	6,688	5,866	7.0	6.8	85	71	.7	.8	1.3	1.2
Varnishers.....	3,261	3,493	3.4	4.1	34	41	.3	.4	1.0	1.2
Leather upholsterers.....	1,928	1,913	2.0	2.2	17	18	.1	.2	.9	.9
Plumbers.....	1,066	993	1.1	1.2	8	8	.1	.1	.8	.8
Coppersmiths.....	701	731	.8	.8	9	13	.1	.1	1.3	1.8
Brass foundry.....	469	529	.5	.6	1	2	(1)	(1)	.2	.4
Masons.....	567	566	.6	.7						
Other trades.....	2,112	1,994	2.2	2.3	28	31	.2	.3	1.3	1.6
All trades.....	95,190	86,314	100.0	100.0	13,119	9,464	100.0	100.0	13.8	11.0

¹ Less than one-half of 1 per cent.

According to the preceding table the total number of apprentices undergoing training at the shops of the German State railroads was 13,119 in 1921 and 9,464 in 1922, indicating a considerable decrease within one year. It should be noted, however, that during the war the number of apprentices employed by the State railroads was very large and is now being gradually reduced. In 1921 the number of apprentices per 100 journeymen was 13.8; in 1922 it had fallen to 11, the proportion, however, varying considerably from shop to shop. An order of the Federal Minister of Transportation, issued

¹ Germany. Reichsarbeitsministerium. Reichsarbeitsblatt, Berlin, Dec. 16, 1923, pp. 499*-505*.

August 11, 1921, provides that in the future the number of apprentices must be in a fixed relation to the journeymen employed in the shop in question (12 to 100 in the case of machinists, 6 to 100 in the case of boiler makers, and 3 to 100 in the case of all other trades).

The machinist's trade is evidently the most popular trade with young men in Germany, as the machinist apprentices formed 91.8 per cent of all the apprentices in the employment of the State railroads in 1921 and 88.1 per cent in 1922, although the number of journeymen machinists formed only 59.8 and 58 per cent, respectively, of the total number of journeymen employed. Next in popularity came the trades of boiler maker and turner, which in 1922 accounted for 6.7 and 2.7 per cent, respectively, of all the apprentices in training. In all the other trades the proportion was below 1 per cent.

If the number of apprentices per 100 journeymen is considered by trades, it is found that here also machinist apprentices come first, 21.2 apprentices having been in training at this trade in 1921 for every 100 journeymen employed and 16.7 in 1922. The boiler maker's trade follows next with 10.4 in 1921 and 12.4 in 1922. The turner's trade comes third with 5 in 1921 and 4.4 in 1922. In all other trades the number of apprentices per 100 journeymen was less than 2 in both years under review. In an article recently published by Prof. E. Toussaint on apprenticeship conditions in the Berlin metal industry² statistics relating to the Berlin metal industry are given, and in the following table a comparison is made of these statistics and those of the State railroads.

DISTRIBUTION OF JOURNEYMEN AND APPRENTICES IN METAL TRADES IN SHOPS OF GERMAN STATE RAILROADS AND IN BERLIN METAL INDUSTRY, 1922, BY TRADES

Trade	Shops of German State railroads						Berlin metal industry		
	All of Germany			In Berlin			Jour- ney- men	Apprentices	
	Jour- ney- men	Apprentices		Jour- ney- men	Apprentices			Num- ber	Num- ber per 100 jour- ney- men
		Num- ber	Num- ber per 100 jour- ney- men		Num- ber	Num- ber per 100 jour- ney- men			
Machinists.....	50, 047	8, 340	16. 7	4, 023	758	18. 8	21, 131	2, 342	11. 1
Blacksmiths.....	5, 994	35	. 6	480	.....	.....	140	.....	.....
Turners.....	5, 900	257	4. 4	363	9	2. 5	9, 022	1, 073	11. 9
Boiler makers.....	5, 062	630	12. 4	256	26	10. 2	480	92	19. 3
Plumbers.....	993	8	. 8	80	.....	.....	1, 327	61	4. 6
Coppersmiths.....	731	13	1. 8	53	3	5. 7	363	28	7. 7
Brassfounders.....	529	2	. 4	49	.....	.....	.....	.....	.....
Total.....	69, 256	9, 285	13. 4	5, 304	796	15. 0	32, 463	3, 596	11. 0

The preceding table shows that the number of apprentices per 100 journeymen in the machinist's trade is greater in the shops of the State railroads than in the Berlin metal industry, but that in the other metal-working trades the ratio in the State railroads is con-

²Verein deutscher Maschinenbauanstalten. Wirtschaft, May 26, 1923: "Der Facharbeiternachwuchs in der Berliner Metallindustrie," by E. Toussaint.

siderably lower than in private industry. In the article mentioned above, Professor Toussaint shows that the number of apprentices in training in the Berlin metal industry is too small to insure a sufficient future supply of skilled mechanics.

All applicants have to undergo psychotechnical tests, and are listed according to the results of these tests. Of 7,044 applicants in 1922, 308 were rejected owing to insufficient educational training, 185 owing to poor health, 3,984 owing to unsatisfactory results of the psychotechnical tests and lack of jobs, and 667 for various other reasons. The great majority of the applicants (4,888, or 69.4 per cent) were sons of railroad employees.

The period of training of apprentices in the shops of the State railroads is fixed at four years, at the expiration of which period the apprentices may take the journeymen's examination.

The railroad administration has compiled detailed statistics as to what becomes of the apprentices trained by it after they have passed the journeymen's examination. These statistics show that in recent years between 75 and 80 per cent of the former apprentices stay on in the service of the State railroads and only about 20 per cent seek employment in privately owned establishments.

Educational and Training Activities of Swedish Trade-Unions¹

ACCORDING to the report of the Swedish Workers' Educational Association (*Arbetarnes bildningsförbund*) for 1922-23, 3,411 members of the National Federation of Trade-Unions were organized in 275 study circles, while 6,587 members participated in 779 study circles of other organizations. In all, 9,697, or about 3.31 per cent of the members of the National Federation, engaged in study-circle activities in that year, the percentage of the membership thus engaged having risen gradually from 0.08 in 1912-13.

During the past 11 years the trade-unions affiliated with the National Federation of Trade-Unions arranged for 57 lecture courses (6 courses during 1922-23) and 247 lectures on special subjects, 50 of them given during the past year.

The following affiliated unions also support educational activities to the extent designated by the annual appropriations: The Metal Industry Workers' Union (1922), 2,085 kronor² for study circles and 500 kronor for a course for unemployed workers; the Railwaymen's Union, 3,000 kronor for correspondence courses; the Sawmill Workers' Union, 600 kronor for study courses; the Transport Workers' Union, 500 kronor for educational purposes; the Typographical Union, 600 kronor to a trade school in Stockholm; and the Painters' Union (1921), 1,000 kronor for educational purposes. The Woodworkers' Union voted 2,000 kronor in 1922 for study purposes.

Of nonaffiliated unions, the Hotel and Restaurant Workers' Union voted 500 kronor for correspondence study courses.

In the Textile Workers' Union, 264, or 1.67 per cent of the members, have participated in study-circle activities, and the members of

¹ Landsorganisationen i Sverige. Fackföreningrörelsen, Stockholm, Jan. 3, 1924, pp. 15-17.

² Krona at par = 26.8 cents. Exchange rate varies.

several other unions have taken part in study circles of their own and of other unions.

In 1922-23, Sweden's Central Organization of Workers had 42 study circles with 455 members, and in addition 693 members participated in 164 study circles of other organizations. In all, 1,105, or 3.58 per cent of the members of this organization took part in study circles.

Apprenticeship Plans

ACCORDING to the Canadian Congress (Montreal) Journal for March, 1924, the Swedish Board of Trade and Board of Education have recently presented to the Swedish Government a joint report on apprenticeship, recommending the passage of an act covering all forms of handicraft, industry, commerce, and domestic work which ordinarily require an apprenticeship period of at least two years. Apprentices should be not under 14 nor over 21 years of age, and the contract of apprenticeship should contain provisions for their attendance at apprenticeship schools or corresponding institutions. The administration of the act should be in the hands of local boards, made up of equal numbers of representatives of employers and of employees, with a chairman appointed by a State authority. The act itself should contain only general principles, and details should be worked out as conditions require by representatives of the Government and of the trades concerned.

INDUSTRIAL ACCIDENTS AND HYGIENE

Quarry Accidents in the United States in 1922

THE report of the United States Bureau of Mines on quarry accidents in the United States during the calendar year 1922, issued as Technical Paper 353, shows that both the fatality and injury rates were lower than in the preceding year, while there was an increase of almost 15 per cent in the total number of man-days of work done by all employees. In the table below the number of men employed in 1922 is given as 79,081; the accidents at the quarries having resulted in 132 deaths and 11,839 injuries, each disability involving the loss of at least one day. The fatality rate was 1.92 per 1,000 300-day workers as compared with 2 in 1921, and the nonfatal injury rate was 171.93 and 174.54 in 1922 and 1921, respectively. These rates are for men working within the quarry pits and also those employed outside at the rock-dressing plants, crushers, mills, etc. The number of men employed within the quarry pits was 48,527, and accidents to these men resulted in 92 deaths and 7,049 injuries, while those employed outside the quarry pits numbered 30,554, with 40 deaths and 4,790 injuries due to accidents. Among men working inside the quarry pits there were 2.31 fatalities and 177.16 injuries per thousand full-time workers, and among men working outside at crushers and other plants the rates were 1.38 killed and 164.76 injured. A total of 20,658,338 shifts was worked during the year and the average number of workdays per man increased from 233 in 1921 to 261 in 1922.

NUMBER OF EMPLOYEES AND NUMBER KILLED AND INJURED, DURING THE YEARS ENDING DECEMBER 31, 1921 AND 1922, BY KIND OF QUARRY

Kind of quarry	Active operators	Men employed		Killed		Injured	
		Actual number	Equivalent number of 300-day workers	Number	Per 1,000 300-day workers	Number	Per 1,000 300-day workers
1921							
Cement rock.....	70	10,815	10,459	20	1.91	2,233	213.50
Granite.....	297	9,479	7,010	18	2.57	940	134.09
Limestone.....	935	39,551	29,399	58	1.97	5,248	178.51
Marble.....	45	4,549	4,025	6	1.49	406	100.87
Sandstone and bluestone.....	194	3,928	2,394	3	1.25	374	156.22
Slate.....	80	3,564	2,848	4	1.40	385	135.18
Trap rock.....	143	5,299	3,823	11	2.88	879	229.92
Total.....	1,764	77,185	59,958	120	2.00	10,465	174.54
1922							
Cement rock.....	78	12,260	12,759	29	2.27	2,438	191.08
Granite.....	250	8,956	7,038	10	1.42	1,036	147.20
Limestone.....	802	39,961	33,728	63	1.87	5,994	177.72
Marble.....	44	4,803	4,626	2	.43	591	127.76
Sandstone and bluestone.....	154	4,305	3,349	4	1.19	337	100.63
Slate.....	74	3,941	3,493	11	3.15	445	127.40
Trap rock.....	147	4,855	3,868	13	3.36	998	258.01
Total.....	1,549	79,081	68,861	132	1.92	11,839	171.93

The report also gives tables showing the number of accidents from each specified cause in the different kinds of quarries and by States. These figures show that explosives and falls or slides of rock or overburden caused by far the largest number of fatalities, while handling rock at face, flying objects, haulage, and machinery were the most frequent causes of injury. At outside works the largest percentage of fatalities was due to machinery and haulage; flying objects, machinery, falling objects, and falls of persons accounted for the highest percentage of injuries.

Mortality Rates Among Industrial Insurance Policyholders and Among the General Population

THE figures in the following table are compiled from a pamphlet entitled "Lengthening Life through Insurance Health Work" just published by the Metropolitan Life Insurance Co. of New York. They show the death rates due to various causes among industrial policyholders in the Metropolitan Life Insurance Co. in the years 1911, 1922, and 1923, and among the general population as recorded for the United States registration area in the years 1911 and 1922.

It is explained that in order to reduce mortality among its industrial policyholders the Metropolitan Life Insurance Co. has for 15 years carried on organized health work by distributing health literature, providing a visiting nurse service, cooperating with State and city health officers, participating in local clean-up, safety, pure-milk, and other health campaigns, making sickness and sanitary surveys, creating a research commission to study influenza, and cooperating with social and civic agencies engaged in working for the improvement in general health conditions.

It is claimed that the improvement in industrial mortality in 1923 as compared with 1911 means a saving of 52,600 lives and of \$12,680,000 in death claims.

The pamphlet presents an interesting series of charts showing in graphic form the death rates from various causes from 1911 to 1923 for the industrial policyholders and from 1911 to 1922 for the general population. In order to show the trend in the death rates, straight red lines have been added to these charts, which indicate clearly a more pronounced tendency toward improved conditions among the insured group than among the population of the registration area.

DEATH RATES PER 100,000 FROM VARIOUS CAUSES IN 1911, 1922, AND 1923, METROPOLITAN LIFE INSURANCE CO. INDUSTRIAL POLICYHOLDERS AND POPULATION OF UNITED STATES REGISTRATION AREA

Cause of death	Death rate per 100,000			Per cent of decline in death rate as compared with 1911	
	1911	1922	1923	1922	1923
All causes of death:					
Metropolitan Life Insurance Co. (industrial).....	122.5	18.8	18.9	29.5	28.9
United States registration area (ages 1 to 74).....	110.1	18.5		16.0	
Mortality of children:					
Metropolitan Life Insurance Co. (industrial).....	16.2	13.7	13.6	40.3	41.9
United States registration area (ages 1 to 14).....	15.7	13.7		35.1	

¹ Per 1,000.

DEATH RATES PER 100,000 FROM VARIOUS CAUSES IN 1911, 1922, AND 1923, METROPOLITAN LIFE INSURANCE CO. INDUSTRIAL POLICYHOLDERS AND POPULATION OF UNITED STATES REGISTRATION AREA—Concluded

Cause of death	Death rate per 100,000			Per cent of decline in death rate as compared with 1911	
	1911	1922	1923	1922	1923
Tuberculosis:					
Metropolitan Life Insurance Co. (industrial)	224.6	114.2	110.2	49.2	50.9
United States registration area (ages 1 to 74)	157.6	96.3		38.9	
Influenza and pneumonia:					
Metropolitan Life Insurance Co. (industrial)	131.2	95.3	106.5	27.4	18.8
United States registration area (ages 1 to 74)	100.2	90.2		10.0	
Diseases of the heart:					
Metropolitan Life Insurance Co. (industrial)	141.8	126.7	128.5	10.6	9.4
United States registration area (ages 1 to 74)	108.7	109.4		2.6	
Chronic nephritis:					
Metropolitan Life Insurance Co. (industrial)	95.0	70.3	69.5	26.0	26.8
United States registration area (ages 1 to 74)	71.8	61.5		14.3	
Cancer:					
Metropolitan Life Insurance Co. (industrial)	68.0	72.0	72.6	² 5.9	² 6.8
United States registration area (ages 1 to 74)	66.2	77.4		² 16.9	
Typhoid fever:					
Metropolitan Life Insurance Co. (industrial)	22.8	5.7	5.1	75.0	77.6
United States registration area (ages 1 to 74)	21.4	7.0		67.3	
All diseases and conditions of the puerperal state:					
Metropolitan Life Insurance Co. (industrial)	19.8	19.0	17.9	4.0	9.6
United States registration area (ages 1 to 74)	16.6	15.9		4.2	
Accidents, all forms:					
Metropolitan Life Insurance Co. (industrial)	77.4	58.0	62.7	25.1	19.0
United States registration area (ages 1 to 74)	76.7	62.8		18.1	
Automobile accidents:					
Metropolitan Life Insurance Co. (industrial)	2.3	13.6	15.4	² 491.3	² 569.6
United States registration area (ages 1 to 74)	2.2	12.5		² 468.2	

² Per cent of increase.

Industrial Health Problems Considered by Annual Safety Congress

GENERAL problems relating to the maintenance of the health of industrial workers received considerable attention both in the general sessions and in the various section meetings of the Twelfth Annual Safety Congress¹ held in Buffalo in October, 1923. These papers, of which this article is a summary, cover such subjects as how to keep well people well, the value of entrance and periodical physical examinations, the work of industrial physicians and surgeons, and the relation of their work to general practice.

A discussion of the subject of keeping well people well, by Dr. Robert Carothers, shows that many people who believe themselves in good health are working under more or less serious handicaps. A thorough physical examination of nearly 1,000 wage earners of both sexes and various races made recently by a committee of the New York Academy of Medicine revealed that only 2½ per cent were perfectly normal and healthy. Twenty-five per cent of these persons were in need of hygienic or social advice and 72 per cent needed either medical or surgical treatment. Taking the result of this examination as probably somewhat typical of general conditions, the need for preventive medicine and for periodic physical examinations is evident. Ignorance of or carelessness in regard to personal hygiene and faulty habits of eating which result in undernutrition, are said to be among the most important causes of ill health.

¹ National Safety Council. Proceedings of the Twelfth Annual Safety Congress, Buffalo, N. Y., Oct. 1 to 5, 1923. Chicago, 168 North Michigan Avenue, 1924. 1,166 pp.

The outstanding achievements in preventive medicine include the advance in the treatment of tuberculosis, the practical conquest of malaria and yellow fever, discovery of the cause of typhoid fever, and the recent advance in the treatment of cancer. The discovery of the fact that focal infections such as are found in the tonsils and teeth result in rheumatic conditions, high blood pressure in middle life, or affections of the heart, lungs, or kidneys, and of the rôle of the endocrine glands in keeping people young and prolonging life have been of immense importance in the field of prevention. The periodic health examination is considered of the utmost importance in combatting premature disability from these conditions, most of which are so insidious that they become well established before their effects are realized by the victims themselves.

The annual address of the president of the American Association of Industrial Physicians and Surgeons, Dr. C. E. Ford, also stresses the necessity for preventive medicine. In any extensive series of examinations of persons who consider themselves in good health, he states that it is amazing how large a number of defects which appear trivial in themselves, but which are potential causes of morbidity, are found, as well as the number of definite indications of serious disease. The time to prepare for old age is early in middle life, and the statement is made that employees in middle life who have held their positions for as long as 20 or 30 years are always in better physical condition than floaters or relatively small-time employees, as nearly always there is a constant ratio between length of employment and physical soundness.

The great gain in life expectancy in recent years has been due to "the application of life-saving methods through discoveries in medicine, biology, bacteriology, entomology, chemistry, and engineering in its various branches." This gain in life expectancy has taken place largely since 1870, when the average length of life was 41 years. It is now 56 years in this country, and the writer states that the average length of life could readily be extended to 65 years if the public would apply the present knowledge of preventive medicine, as scientific knowledge is far in advance of its adaptation and practical utilization. The three major factors which have combined to increase the average longevity are preventive medicine or public health service, modern surgery, and the safety movement.

Recent studies show that in the United States 3 persons of every 100 are constantly ill, which amounts to more than 3,000,000 persons incapacitated from sickness practically every day in the year, while 20 per cent of the population, or 1 person in every 5, may expect at least 7 days of sickness every year. The time lost by working people in the United States and in Canada annually because of sickness, it is estimated, reaches a total of 770,770,000 days and the average duration of illness is slightly more than 35 days. Families of wage earners spend from \$32 to \$53 a year on account of sickness in addition to the gratuitous hospital care which they receive in many instances.

The relation which has been shown by investigation to exist between a low income and sickness suggests that "the industrial physician occupies a strategic position in the intricate problem of poverty." Since there is no doubt that sickness is frequently the cause of poverty, the prevention of disease becomes a factor in the

improvement of social conditions. For this reason the extension of the work of the industrial physician to include the family of the workman will have a beneficial effect upon the industrial future of the Nation.

The results of physical examinations, particularly in connection with his experience as research manager in a pulp and paper mill, were discussed by Mr. Seth L. Bush. A number of claims for compensation for injuries which were shown to be due to previously acquired infections or conditions were the reasons for instituting physical examinations of applicants for employment in this particular plant. The labor relations in the mills of this company had been satisfactory, and the workmen's committee agreed with the management that the physical examination of applicants would be mutually advantageous.

Employment was not refused as a result of the examinations unless the applicant refused to have proper treatment or the examination revealed such a serious condition that the applicant was induced to look for lighter work. Corrective treatment was advised and arranged for in all cases where serious defects or disease were found. Of a total of 547 applicants examined, corrective treatments were prescribed in 154 cases. Only two persons were refused employment—one with an advanced case of diabetes and the other a potential apoplectic who afterward died. The experience of this firm with physical examinations therefore has not meant the exclusion of a large number of applicants from work but, rather, a selective process by means of which they are placed on work which is best suited to their physical capabilities and limitations.

Another paper on the subject of physical examinations was read by Dr. R. S. Quinby, covering his experience with the examination of employees from the standpoint of occupations in the rubber industry. In general, he said, physical examinations follow the same lines in different industries, that is, the aim is to discover the more serious conditions, leaving those which may develop importance eventually to be taken care of in the subsequent work of the department. As time is an important element in the initial examination, the writer considers that this can be done in from 5 to 10 minutes in the large majority of the cases, provided the man comes to the doctor ready for the examination and the preliminary information has already been gathered and recorded. At the same time that the routine examination is being carried out the doctor can secure a brief history of former illnesses. If examinations are carried out in a tactful manner the writer sees no reason why they should arouse any antagonism among employees.

In the rubber industry there are certain specific hazards such as exposure to the chemical hazards, hexatetramine, urotropin, and benzol, and in addition certain physical hazards, heavy lifting, etc., which, however, may be found in any industry. The examination from an occupational standpoint, therefore, does not present any problems which may not be found in other industries, although the effort is made to put individuals without serious physical defects in the occupations which present exposure to lead, benzol, or hexatetramine poisoning.

Defects and their percentage of occurrence are believed to run about as follows: Gross eye defects, from 5 to 7 per cent; hernia, among men, from 5 to 7 per cent; gross circulatory defects, about 2 per cent, and lung conditions, some tubercular and some not, about the same percentage. These defects when found should be followed through to their correction either in the medical department or outside if such a department is to build on a constructive health basis.

The experience of a large life insurance company in regard to the effect of physical examination on the health and welfare of employees was discussed by Mr. Louis I. Dublin. The medical service of the company covers 8,000 men and women in the home office and 17,000 in the field service. For a long time annual physical examinations have been required for practically every one in the company's employ. The purpose of these examinations has been to have each individual know his physical condition and in case of impairment the steps necessary to be taken to effect a cure or improvement. The sanitarium care given by the company has resulted in a large number of cures, there being 300 workers in the home office at the present time who have had the progress of tuberculosis arrested and have been returned to work. The medical division keeps in constant touch with employees in the office whose physical examinations have shown conditions of anemia, malnutrition, overweight, etc., while defective eyesight has been improved through the prescription of proper glasses; and prophylactic dental work is done for each employee twice a year. The results of this work are said to have been improved health and efficiency and better industrial relations.

Various problems have arisen in the course of the development of industrial medical service, among them being the relation of industrial medicine to general practice. In a discussion of this subject Dr. Harry Meyers states that in some instances the medical service has reached a point where it is no longer good manufacturing procedure and where it has to be drastically curtailed. Industrial medical service can reach its greatest point of usefulness, he considers, only if the integrity of the general medical profession is preserved, and not if it is used in such a way as to become a menace to the medical profession in the communities in which it is developed. In order to secure this result every means must be taken to preserve the valuable relationship which usually exists between the family physician and his patient. Instead of taking away work from the general practitioner the industrial medical service may be the means of increasing his work through the interest which the industrial dispensary can arouse in health matters and through the discovery of physical defects and chronic diseases.

This is, however, only one side of the question. The general physician has also a duty in preserving the proper balance between the two fields of medicine. First among them, it is said, is the right which industrial physicians have to expect that the physician in general practice shall apply "the fundamental teachings of the best medical thought, and that he use rational therapeutics instead of the irrational prescriptions so often sold by the commercial pharmaceutical houses and so often accepted by many members of the profession." The general practitioner should also be willing to cooperate with the industrial physician when it comes to the point of advising

his patient to give up his job. Advising a man to change his work is usually a serious matter, since it often involves impossible readjustments, and, as it is considered that such a suggestion is often made thoughtlessly, the writer believes that "no doctor has a right to give such advice unless he is willing to go to the plant and personally see just what his patient is doing and under just what conditions he is doing it." If this kind of a relationship is maintained between the industrial physician and the general physicians so that both recognize their limitations and are willing to recognize the sphere of the other, their greatest usefulness will be attained.

Report on Benzol Poisoning by Committee Appointed by National Safety Council¹

PAPERS and discussions on benzol poisoning aroused so much interest at the National Safety Congress held in Detroit in 1922 that the industrial poisons committee of the chemical section of the National Safety Council was directed to make a study of the question. A special subcommittee consisting of seven members with Dr. C. E. A. Winslow as chairman, was appointed to make the study, and the following report, which is in the nature of a preliminary report, was made to the Twelfth Annual Safety Congress held at Buffalo October 1 to 5, 1923. A very complete bibliography covering all phases of the subject is printed in the proceedings of the congress as part of the report of the committee.

It was felt that our first step should be to arrange for a thorough survey of the information at present available in printed form, and Dr. J. W. S. Brady, a member of the committee, was good enough to undertake this task. Doctor Brady has prepared an exhaustive bibliographical review of the subject, which is presented in full in an appendix to this report.

Benzol.—Benzol is a pure hydrocarbon obtained from the distillation of coal tar and from the strippings of coke-oven gas. It was not much used before 1910, but production, expanded to meet war needs, has now made it readily available and comparatively cheap. It is an excellent solvent for organic material.

Industrial uses of benzol.—Except where it is used in the manufacture of chemicals and explosives, burned as motor fuel, in illuminating gas, or in welding, benzol is used chiefly as a solvent—mainly as a rubber solvent for cementing in the manufacture of rubber goods, tires, hose, footwear, garments, gloves, and in the sealing of cans. It is used in the making of artificial leather, linoleum, and straw hats. It is used in painting—either in tar paints, or as a "thinner" or varnish remover. It is used as a solvent for cement in can making, in shoe manufacture, in extracting fat from bones, and in dry-cleaning processes.

Kinds of benzol.—Besides pure benzol and toluol and xylol there are several kinds of commercial benzols, these containing toluol, xylol, thiophene, and, rarely, traces of carbon disulphide. The usual commercial products are:

Pure benzol—a clear colorless liquid of a characteristic odor. B. P. 79.7° C.

Ninety per cent benzol: So called because in the distillation 90 per cent distills over at a temperature less than 100° C. It is composed of 80-85 per cent benzol, 13-15 per cent toluol, 2-3 per cent xylol, and sometimes contains as impurities traces of olefins, paraffins, sulphureted hydrogen, and other bodies.

Fifty per cent benzol: This substance contains 50 per cent of constituents which distill below 100° C., and 90 per cent below 120° C.; it is a very mixed product, with only 40 to 50 per cent benzol.

Solvent naphtha: This material is called solvent naphtha because it is used extensively (especially in England) for dissolving rubber. It is relatively free from benzol, and consists largely of xylol.

¹National Safety Council. Proceedings of the Twelfth Annual Safety Congress, Buffalo, N. Y., Oct. 1-5, 1923. Chicago, 168 North Michigan Avenue, 1924. pp. 204-213.

It seems generally accepted that pure benzol is more poisonous than the other grades referred to.

Susceptibility.—A great variation in the individual susceptibility appears to be well established. Women and children, as well as individuals of deficient eliminative powers, are affected more easily. Atmospheric conditions of temperature and humidity seem to affect greatly susceptibility.

Absorption.—Entrance of benzol into the body occurs chiefly through the lungs. Eighty per cent of inspired benzol is absorbed by the body, less than one-half of which is recovered in six hours. Skin absorption is slight. Given by mouth in the treatment of certain blood conditions, doses up to three grams a day have been tolerated for a considerable period. (As a remedy it is at present little used.) It is excreted through the lungs, or as phenols in the urine.

Action.—The action of benzol is anesthetic on the nervous system, and destructive of blood and fat. Doses as small as 0.02 to 0.05 parts of pure benzol per 1,000 parts of air in animals affect the cardiorespiratory nervous centers, and produce delirium and death. Small doses, long continued, affect the nervous system, the blood and blood-forming organs. The white cells, especially those formed in the bone marrow, are destroyed. Platelets disappear. Coagulation and viscosity are effected. Immune bodies and antibody production are depressed. Red cells are destroyed. Recovery is slow.

Post-mortem pathology.—Post-mortem pathology in acute cases shows cyanosis, fluid blood, minute hemorrhages from skin and mucous membranes, and the presence of benzol in brain and tissues. In chronic cases the picture is that of nonregenerative anemia with purpuric spots and hemorrhages, and fatty degeneration of the bone marrow and organs.

Symptoms of poisoning.—Faintness, dizziness, breathlessness, rapid pulse, cyanosis or lividity, and sudden death, preceded at times by acute mania or delirium, in acute poisoning and in chronic poisoning, gastrointestinal symptoms, anemia, reduction of white cell count, especially the polymorphonuclears; reduction in red cells with increase in coagulating time of blood; neurasthenia, hemorrhages from various mucous membranes, purpuric spots on the skin. Local action sometimes produces irritation and dermatitis. Numbness, pallor, parasthesia of exposed fingers is common.

Diagnosis.—The diagnosis of benzol poisoning is made by history of exposure, plus gastrointestinal symptoms, anemia, hemorrhages, purpura, increase in coagulating time of blood, reduction in both red and white blood cells. The reduction in numbers of white cells is especially characteristic of benzol poisoning.

Treatment.—Immediate, absolute rest and absence of any effort; fresh air or oxygen; prolonged convalescence, in acute poisoning and chronic cases, if mild, recover on removal from exposure with treatment of fresh air and iron tonics. Cases with purpura or hemorrhages require repeated transfusions and blood-building food and tonics.

Preliminary Study of Extent of Benzol Hazard

In order to obtain a preliminary idea of the extent of the problem as it exists in American industry to-day an incomplete preliminary list was prepared of 324 industrial establishments which, from the nature of their products, might be expected to use benzol. Through the courtesy of Mr. W. S. Paine of the Aetna Life Insurance Co. a questionnaire was sent to this list of industrial establishments in July and to date 140 replies have been received. Of these 56 replied that they did not use benzol in any form, leaving 84 firms who do make use of this substance. Some idea as to the amount of benzol used by the firms replying to our questionnaire may be gained from the following figures: Thirty-six replies gave no definite information in regard to this point. In 19 cases the amount of benzol used was insignificant; in 6 cases it was between 5 and 25 gallons per week; in 4 cases between 26 and 99 gallons; in 10 cases between 100 and 500 gallons; in 3 cases between 501 and 999 gallons; in 6 cases over 1,000 gallons—reaching the very high figures of 2,200, 3,000, 7,500, 8,000, 10,000, and 30,000 gallons per week. The six largest users included three rubber companies (8, 23, and 25) and three large chemical concerns (13, 24, and 19), one of the latter is principally concerned with the supply of products for the making of can seals. It is interesting to note that out of 15 companies reporting cases of benzol poisoning only 2 are among those using less than 100 gallons of benzol per week; 4 were among those using between 100 and 1,000 gallons; 3 were among the 6 firms using over 1,000 gallons; while 6 were among the 36 firms giving no information as to the amount of benzol used.

A more helpful analysis from our standpoint deals with the number of employees exposed to possible toxic effects of the benzol. We have this information

reported for 67 firms, 73 industries having failed to state the number of employees exposed in processes where benzol constitutes a hazard. The general results are indicated in the table below with comparative figures showing the number of firms in each class which reported having experienced cases of benzol poisoning.

TABLE 1.—NUMBER OF EMPLOYEES EXPOSED TO POSSIBLE BENZOL POISONING

Item	0 to 4	5 to 9	10 to 24	25 to 49	50 to 99	100 and over	No information
Number of establishments in each class.....	30	14	10	7	2	4	73
Number of establishments reporting cases of poisoning.....	3	1	3	3	1	4	

Out of 23 establishments with 10 or more employees exposed to benzol poisoning 8 were rubber factories, 5 were chemical works, 4 were paint and varnish makers, 3 were gas plants making benzol as a by-product, and 3 were plants of other types.

It will be noted that out of 44 establishments with less than 10 employees exposed to benzol poisoning only 4 reported as having experienced cases of poisoning. Of 17 firms with from 10 to 49 employees exposed, 6 had experienced cases of poisoning, while of the 6 firms with more than 50 persons exposed to benzol all but one had experienced industrial poisoning by benzol. It is suggested that facilities for the diagnosis of benzol poisoning may influence statistics such as Table 1 presents, and that full-time physicians in large industries may naturally be expected to diagnose cases of industrial poisoning more frequently than persons who are not familiar with the symptoms of such poisons.

We present in Table 2 the more important data with regard to 33 individual industries whose reports seemed of special interest for one reason or another. The table includes (a) all plants reporting cases of benzol poisoning, (b) all plants reporting the exposure of 10 or more employees to the possibility of benzol poisoning, and (c) all plants reporting the use of 500 or more gallons of benzol per week. The plants are arranged in order according to the number of employees exposed to benzol and are identified by arbitrary key numbers, since the information obtained in this study was in many cases of a confidential nature.

TABLE 2.—DATA WITH REGARD TO ESTABLISHMENTS WHERE BENZOL HAZARD MAY EXIST

Key No.	Product	Gallons of benzol used per week	Number of employees exposed	Poisoning cases	General precautionary measures used
8	Rubber goods.....	2,200	1,080	Yes.	Ventilation.
21	do.....		150	Yes.	Do.
9	do.....	525	100	Yes.	Closed containers, ventilation.
15	Chemicals.....		100	Yes.	Closed apparatus, ventilation, helmets, partial elimination of benzol.
5	Rubber goods.....	100	50	Yes.	Ventilation, medical examination.
26	Celluloid, leather, cloth.....		50	Yes.	Local ventilation, medical examination.
27	Japanned goods.....	60	35	No.	Ventilation.
6	Gas by-products.....	500	32	Yes.	
25	Rubber goods.....	7,500		No.	Closed containers, ventilation.
23	do.....	8,000	30	Yes.	Do.
28	do.....		25	No.	Limiting use of benzol.
29	Chemicals.....		25	No.	
17	do.....		25	Yes.	Closed containers, ventilation.
30	Rubber goods.....	25	25	No.	
31	Gas by-products.....		20	No.	Closed containers.
38	Paints and varnishes.....		20	No.	Ventilation, closed containers.
32	Cans.....		18	No.	Local ventilation.
11	Paints and varnishes.....		15	Yes.	Respirators.
33	Gas by-products.....		13	No.	Closed containers, ventilation.
20	Rubber goods.....	25	12	Yes.	Local ventilation, rubber gloves.
22	Vegetable oils.....		12	Yes.	Medical examination, education.
34	Chemicals.....		10	No.	Closed containers, ventilation.
35	Paints and varnish.....	250	10	No.	Education.
10	Chemicals.....		10	No.	Closed containers, care in cleaning tanks.
19	Can solvents.....	10,000	8	Yes.	Ventilation.
24	Chemicals.....	30,000	7	No.	
36	do.....	750	4	No.	Closed containers, ventilation.
37	Benzol used in cutting asphalt.....	700	4	No.	Closed containers, low temperature.
13	Chemicals.....	3,000	4	No.	Closed containers.
12	Paints and varnish.....	150	3	Yes.	Change of employment.
7	Rubber goods.....	5	3	Yes.	Ventilation, limitation of use of benzol.
16	Motor fuel.....		2	Yes.	
13	Coal-tar distillates.....			No.	

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We may now pass to a more detailed consideration of the difficulties experienced by the reporting firms in regard to benzol poisoning. It will be noted that of a total of 140 firms reporting, 56 used no benzol and 19 used it in very insignificant amounts. This leaves 65 firms using an appreciable amount of benzol (where any information was available, at least 5 gallons per week). Of these 65 firms, 15 have noted cases of poisoning. The information submitted by these companies may be summarized as follows:

FIRM 5. A rubber company using about 100 gallons of benzol per week with about 50 employees exposed. Four fatal cases occurred in earlier years, but at a time when the use of benzol was greater than at present. Experiments are now being made with a carbon tetrachloride-rubber cement to replace the present benzol. Three of the four fatal cases were among cousins, and all cases occurred in the spring. The principal symptoms noted were anemia, purpura, and hemorrhage, blood changes. There were no instances of sudden acute shock.

FIRM 6. A gas company producing benzol as a by-product. About 500 gallons a week are handled and 32 men exposed. During 12 years' operation three or four men have been temporarily overcome by fumes and in one department where benzol fumes are sometimes liberated men have experienced some gastrointestinal symptoms.

FIRM 7. A rubber company using only 5 gallons of benzol a week for cement in certain processes. Three men are now exposed. In the past when benzol has been used more extensively, those who were exposed constantly complained of weakness, headache, and pains in the eyes. They had a form of intoxication which largely passed over night. One case exhibited these symptoms in very marked form, others in a slighter degree.

FIRM 8. A rubber company using about 2,200 gallons of benzol per week with 1,080 employees exposed. One woman worker collapsed, but was revived in a few minutes in the open air.

FIRM 9. A rubber tire company using about 525 gallons per week, 100 employees being exposed to possible poisoning. One employee suffered from hemorrhages from the nose and was relieved by removal to another department.

FIRM 11. A paint company with 15 workers exposed to possible poisoning. One case of sudden collapse.

FIRM 12. A paint and varnish manufacturing establishment with about 100 gallons of benzol used per week. Three employees are exposed to possible poisoning. No poisoning is reported, but skin irritations have been noted. Symptoms relieved by transfer to other work.

FIRM 15. A large chemical plant where about 100 employees are in processes where benzol is used. Two fatal cases in artificial leather coating department in the spring of 1920 and one fatal case in the same department in the spring of 1922. Has experienced several cases of nosebleeding in employees of coating department, and symptoms have cleared up with change of work.

FIRM 16. Manufacturers of benzol-blend gasoline motor fuel. Two employees exposed. Nervous disturbances and neurasthenia have been noted and the firm has at times been considerably worried as to the situation.

FIRM 17. A chemical company in which 25 men are employed in benzol processes. Some five or six years ago a definite case of benzol poisoning occurred from special unusual exposure and during the past year another worker gave some indication of gastrointestinal disturbances.

FIRM 19. A chemical corporation making benzol products for use in the making of can seals. 10,000 gallons of benzol used each week, and 8 men exposed to possible poisoning. Has experienced no cases of poisoning among its own employees, but has had several cases of probably acute benzol poisoning reported by users of its products.

FIRM 20. A rubber company in which 25 gallons per week of benzol is used, 12 workers being exposed. One or two cases of poisoning have occurred with symptoms of anemia, gastrointestinal disturbances, dizziness, and cracking of the nails and skin of fingers.

FIRM 21. A rubber company with 150 employees exposed. Two years ago cases of poisoning occurred but lately improvements in ventilation and abandonment of impregnation processes have eliminated the trouble.

FIRM 22. A firm using benzol for the extraction of vegetable oils. Twelve workers exposed. One foreman was overcome after entering the storage cellar when a valve had broken.

In addition to the experience reviewed above we may cite the statement of a firm (2) which in the past has handled benzol in connection with the manufacture of oils and chemicals that poisoning troubles experienced in the past have been

eliminated by the substitution of toluol for the benzol. The chemist of this company writes:

"While we have not made exact experiments to support this opinion, we have ascertained that pure benzol gives considerably less trouble than the ordinary commercial grades. In the few cases where we use benzol we employ the pure product exclusively with very good results." (COMMITTEE NOTE: This opinion appears to lack uniformity with the preceding paragraph.)

Another company (4) writes:

"Recent developments in the industry are such that within the next few months we confidently expect to entirely eliminate the use of benzol if experimental work on another solvent has proceeded far enough to strengthen our belief that it will be a successful substitute."

The representative of another company (18) writes that while they do not use benzol at present he personally appreciates the effects of benzol poisoning since he was laid up for about two days at one time with extreme nausea and headache as the result of handling this substance. It is of some interest to note that three companies (1, 3, and 10) manufacturing or distributing large quantities of benzol report no complaints from customers in regard to poisoning since the war.

Finally we may consider the special precautions reported by certain of the firms responding to our questionnaire. It should be noted that the following are precautions reported to the committee and should not be considered as recommended by the committee. (The recommendations of the committee are considered in Part V of this report.)

- (a) The use of inclosed apparatus for the handling of benzol.
- (b) Special precautions in handling benzol so as to minimize exposure to the atmosphere.
- (c) The use of special exhaust ventilation at points where benzol must necessarily be exposed.
- (d) Ample ventilation of the general occupied spaces where benzol is handled.
- (e) The handling of benzol so far as possible at low temperatures.
- (f) The use of special protective breathing apparatus.
- (g) The use of rubber gloves.
- (h) Systematic medical examination.
- (i) Education of the worker in regard to the dangers of the process.

Of the 140 firms using benzol replying to our questionnaire, 42 specify protective measures of one or another of the types indicated. Of the 23 establishments in which 10 or more persons are exposed to benzol, all but 3 report special precautions. Among the most detailed statements in regard to this point may be mentioned the following:

FIRM 5. Physical examination with frequent reexamination of all exposed employees. General room ventilation by downward draft in all rooms where benzol is used.

FIRM 9. Very complete ventilation to remove fumes. "We keep liquid in covered containers at all times."

FIRM 10. "We believe that the chief hazard in working about benzol is to safeguard men in cleaning tanks which have contained benzol. Our procedure is as follows: Steam out tank, then fill in with water to displace all gas. We do this as often as necessary, then allow a man to enter the tank with a rope round his waist and an attendant watching him constantly."

FIRM 13. Benzol is used only in closed containers (for sulfonation) and delivered by compressed air. Fumes are condensed from sulfonators into the open.

FIRM 17. "We aim to handle benzol only in a closed system with further precaution of very ample ventilation in order to eliminate any hazards which may be present."

FIRM 19. "We change the air every few minutes by ventilation."

FIRM 20. Specially designed hoods with downward ventilation are provided. This has been found very effective in the elimination of fumes from preforming processes and cementing tables. Fountain type safety cans for moistening sponges are provided and rubber gloves are used.

FIRM 22. The company doctor and chemist have reviewed American and German literature on benzol poisoning. The company doctor has drawn up rules for first-aid treatment, a copy of which is on the inside cover of the box containing the drugs he prescribes. The rules for the use of these drugs were explained to the manager, superintendent, chemist, and each of the three foremen, and instructions were given as to the symptoms of chronic poisoning.

[1124]

Plans for the Future

The results of our questionnaire taken face value would appear to suggest that the industrial firms using benzol are keenly alive to the possible dangers involved and in most instances have taken very definite precautions for the protection of their employees. It would appear that the number of acute cases of benzol poisoning is not large, but it is obvious that cases of mild chronic poisoning may often occur without detection.

Furthermore, it may be noted that out of 23 establishments in which 10 or more persons are exposed to possible benzol poisoning, 11, or nearly half, report cases of poisoning, while of 6 plants in which 50 or more employees are exposed, all but 1 report poisoning.

The principal purpose of our questionnaire was to obtain some idea of the particular industrial processes and the particular plants in which the dangers of benzol poisoning were most considerable. If the committee is to be continued we hope in the future to make a more detailed study of those industries where the hazard seems to be most serious and to report more fully at a later date in regard to the extent of the hazard and the most effective means of controlling it.

Tentative Recommendations

Meanwhile the committee recommends the following precautionary measures as a means of preventing poisoning by benzol in processes where this material constitutes a hazard:

1. The use, where possible, of inclosed apparatus for the handling of benzol.
2. The use of special exhaust ventilation where employees are exposed to the fumes of benzol:

- (a) Where benzol is evaporated at room temperatures, air removal by general room ventilation with down draft is recommended, although in certain inclosed processes where negative pressure can be applied, direct ventilation (from the inclosure) with upward draft may be indicated.

- (b) Where localized heat is applied in the evaporation of the benzol, hoods or inclosures should be provided with up draft. This draft should be sufficiently intensive and applied so closely to the point of origin of the evaporating benzol to insure the complete removal of all of the benzol before the heated surface is removed from the hood or inclosure. This recommendation deals with specific processes where sufficient upward air movement is created by the heated surface to overcome the natural density of the benzol vapor.

3. The use of special exhaust ventilation for tank cars and other containers, together with the use of special protective breathing apparatus in the cleaning of tanks and other inclosed spaces where benzol may constitute a hazard. The committee does not recommend the use of ordinary commercial respirators as a means of preventing the absorption of benzol fumes.

4. Physical examination of all new employees with the object of excluding from benzol processes applicants suffering from—

- (a) Organic diseases of heart, lungs, or kidneys.
- (b) Hemorrhagic tendencies.
- (c) Anemia or any unusual blood picture.

5. Frequent reexaminations of all employees exposed to benzol and the temporary exclusion from benzol processes when examination reveals the presence of—

- (a) Hemorrhages from the mucous membranes of the nose, mouth, or other organs.

- (b) Decrease of more than the following from the employee's normal blood picture (normal conditions will be obtained from previous examinations of the individual employee):

- (1) White cells, decrease of 25 per cent; but in no case should an employee with a white cell count of less than 5,000 be continued in the benzol processes.

- (2) Red cells, decrease of 25 per cent.

- (3) Haemoglobin, below 70 per cent.

(NOTE.—Reduction in white cells is the most important condition to be noted. Still more delicate and specific is the change in ratio of the various types of white cells.)

6. Investigation of absences from work by persons familiar with the symptoms of benzol poisoning.

7. Detailed record of the results of physical examinations, duration of symptoms, and treatment of illnesses.

8. The employee should be made acquainted with the symptoms which demand early medical attention.

9. A liberal policy of interdepartment transfers for employees presenting minor symptoms of acute benzol poisoning.

[1125]

Systemic Poisoning by Hair Dye

THE Weekly Bulletin of the New York City Department of Health, April 5, 1924 (pp. 107, 108), contains an account of a case of poisoning caused by the hair dye used by the proprietor of a hair-dressing shop in connection with his work. There was a history of sudden seizures over a period of nearly three years during which time he had often worked in the fumes of the hair dye and had occasionally applied the dye to his customers without wearing gloves. The attacks came on suddenly, causing pain, palpitation, and exhaustion.

On the occasion when the patient was examined he had the appearance of a person who had been on a drunken debauch.

His face was gray, cyanosed, and blotchy. His eyes were watery, the conjunctiva injected, and the eyelids swollen. The lips and ears were violet, the tongue was swollen and covered with a thick yellow and brown fur. The gums were very swollen, standing away from the teeth, and purple. Some of his fingers were stained, apparently with iodine. The pulse was 105, regular and fairly strong. The temperature was normal. He was nauseated, and had taken no food all day. He complained of pain, chiefly in the epigastric and hypochondriac regions, and between the shoulders. There was slight palpitation, and he looked anxious and strained. He described some difficulty in swallowing, with a burning sensation in the throat and behind the sternum.

Two bottles of the dye were analyzed by a chemist who was told that it was suspected of causing mixed symptoms of lead and arsenic poisoning. His report was as follows:

In accordance with your instructions we have examined the two solutions of hair dye which you handed to us. One solution gives the reactions for both metaphenylenediamine and paraphenylenediamine; the other is a solution of hydrogen peroxide.

Paraphenylenediamine is commonly used as a hair dye, and injurious effects on workpeople engaged in the manufacture of this compound are attributed to the diamine itself and to its oxidation products.

Metaphenylenediamine possesses marked poisonous properties, its physiological action resembling that of the leucomaines and ptomaines. An authority states that a dose of 0.1 gram per kilo body weight produced salivation, vomiting, diarrhea, and abundant excretion of urine in dogs and subsequently death by coma. Symptoms similar to those of intense influenza were also produced in addition to the more severe effects.

Phenylenediamine derivatives are used in the production of dyes for furs and are commonly used in the preparation of brown dyes.

By avoiding exposure to the risk of absorption the patient at the end of three months had had no return of the symptoms. The case is regarded as evidence of the peculiarly elective action of phenylenediamine and suggests that certain people are extremely susceptible to it and that such persons do not necessarily show any lesions of the skin. This fact is important, since instructions to test its effects on a small area of skin and not to use it if any reddening of the skin occurs within a few hours are included in the packages of dye.

The present case shows that the action of the dye as a systemic poison may be delayed and, as in this particular case, owing to this delay, the symptoms had never been associated with the occupation, it seems probable that others may be endangering their health to a greater or less extent by dyeing their hair.

It has been shown in connection with fur dermatitis that the toxic phenylenediamine loses its toxicity when oxidized by hydrogen peroxide. Oxidation of the phenylenediamine may not always be com-

plete, however, and to correct this the furs are washed from seven to eight hours. If this washing is not thorough the furs may remain toxic, causing dermatitis.

In hair dyeing the process is similar. Hydrogen peroxide and phenylenediamine are mixed and the solution applied to the hair, but as washing may spoil the color, the temptation is not to wash the hair too thoroughly. Using the solutions separated, as is sometimes done in order to obtain a better and more lasting effect, is said probably to be attended with even greater risk of a toxic result.

Hand-Tool Injuries in Wisconsin

THE Industrial Commission of Wisconsin in its monthly publication, Wisconsin Labor Statistics, issue of November and December, 1923, gives a detailed study of the hand-tool accidents and injuries which occurred in that State in the course of three years. Some tables of the report cover the three-year period ending June 30, 1923, others the three calendar years, 1920, 1921 and 1922. During the three years ending June 30, 1923, there were 52,532 compensable cases, of which 4,217 were due to hand-tool accidents. These comprise, therefore, 8 per cent of all compensable cases. The amount of indemnity paid was 6.44 per cent, and of medical aid, 6.78 per cent of the amounts paid respectively for all compensated cases.

A large proportion of the permanent partial injuries caused by hand tools affect the thumb, fingers, and eyes, the last of course by flying objects set in motion by the tools, either nails or flying particles struck off by the tools.

Using data for the calendar years 1920-1922, hand tools caused permanent partial disabilities in 398 cases, of which 45 were thumb injuries, 118 injuries to one finger only, and 160 permanent injuries to the eye or eyes. Three deaths due to hand tools occurred in each of these three years, and one permanent total disability due to the loss of the second eye occurred in 1921.

Computation of the days lost in these three years, on the basis of 6,000 days for each death or permanent total disability, shows a total of 152,221 days for all hand-tool injuries in 1920, an average of 120.1 days per case; 154,234 in 1921, an average of 110.6 days per case; and 139,286 in 1922, or an average of 100.6 days per case.

One table shows for the three years ending June 30, 1923, the manner of occurrence of hand-tool injuries for all cases settled during that period. Of 4,217 such cases, 2,548 were due to glancing, i. e., to the tools glancing off and striking the person; of these, 589 were injuries by axes, 396 by hammers, 419 by knives, 145 by wrenches, and 88 by chisels. The second largest cause of injuries was flying particles, not nails, set in action by the tool. These accidents numbered 428, of which 137 occurred in the use of hammers, 55 in the use of chisels, 29 in the use of sledges, and 149 in the use of hand tools not otherwise classified. Tools slipping or letting go caused 296 injuries, of which 151 occurred in the use of wrenches; tools in the hands of coworkers caused 163 injuries, sledges (34 cases), hammers (24 cases), and axes (13 cases) being the most frequent offenders;

hand tools not otherwise classified were also responsible for 24 cases. Next in rank comes the slipping or falling of loads, responsible for 131 cases, of which 34 occurred in the use of jacks, 31 in the use of tongs, and 27 in the use of cant hooks.

Other tables show, by industry groups, the total number of days lost and total cost for hand-tool injuries, the average per case, and the distribution of permanent partial disabilities. The total number of such permanent partial disabilities was 401, of which 95 occurred in metal working, 62 of these affecting one eye and 19 one finger. Construction comes next with 69 cases, of which 29 affected one eye, 16 one finger and 9 a thumb; while third in rank is lumber and lumber products with 68 injuries, of which 16 affected one finger, 12 a thumb, and 10 one eye.

Practical suggestions are given as to the avoidance of hazards involved, particularly under the caption "Stumbling or slipping in carrying tools," and injuries due to tools in hands of coworkers. The number of injuries per year is quite uniform, though their severity as measured by days lost showed some reduction. The number of eyes injured is obviously of great importance, and suggests the desirability of guarding, wherever possible, against flying particles, not nails, set in motion by the tools, though there were 47 cases in which flying nails were responsible for injuries, besides the 428 caused by other flying objects.

The study is an interesting contribution to the detailed examination of the causes and effects of the simpler industrial accidents.

Fatal Accidents in Canada, 1923

THE following statistics on fatal industrial accidents in Canada in 1923, are taken from the March, 1924, issue of The Labor Gazette, published by the Dominion Department of Labor:

FATAL INDUSTRIAL ACCIDENTS IN CANADA DURING 1923

Industry group	Total number	Per cent of total	Industry group	Total number	Per cent of total
Agriculture.....	129	9.2	Transportation and public utilities.....	367	26.3
Logging.....	193	13.8	Trade.....	24	1.7
Fishing and trapping.....	29	2.1	Service.....	60	4.3
Mining, nonferrous smelting, and quarrying.....	187	13.4	Miscellaneous.....	38	2.7
Manufacturing.....	196	14.0			
Construction.....	173	12.4	Total.....	1,396	100.0

FATAL INDUSTRIAL ACCIDENTS IN 1922 AND 1923, BY CAUSES

Cause	1922 ¹	1923	Cause	1922 ¹	1923
Prime movers.....	35	52	Tools.....	5	9
Working machines.....	35	38	Animals.....	38	76
Hoisting apparatus.....	39	55	Moving trains, vehicles, etc.....	236	264
Dangerous substances.....	136	206	Falls of persons.....	129	180
Stepping on or striking against or being struck by objects.....	12	14	Other causes.....	245	230
Falling objects.....	169	218			
Handling objects.....	49	54	Total.....	1,128	1,396

¹ Revised figures.

Prohibition of Use of White Phosphorus in Esthonia¹

AN ACT passed by the National Assembly of Esthonia, August 4, 1923, which was to become effective January 1, 1924, prohibits the manufacture of matches and their importation from abroad if white phosphorus is used in their manufacture. It is also forbidden to store white phosphorus in match factories. Violations of the law will be punished by a fine and the matches unlawfully manufactured or imported will be forfeited to the State Treasury.

¹ International Labor Office. Legislative series, 1923, Esthonia, No. 1. Act: Prohibition of white phosphorus. 1 p.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Operations of Workmen's Sick and Death Benefit Fund of the United States of America, 1923¹

THE Workmen's Sick and Death Benefit Fund of the United States of America, a sick benefit society organized largely by immigrants from Germany and Austria in 1884,² has recently issued its thirty-ninth annual report, covering the year ending December 31, 1923, a summary of which is given below:

Branches.—The society closed the year with 347 branches, or 1 branch more than in 1922; 3 branches were organized during the year, while 2 were dissolved because no suitable officers could be found among the members.

Membership.—For the first time since 1919 the society reports an increase in membership, 1,140, as against a decrease of 380 in 1922. The number of new members admitted was 3,203 as against 1,787 in the preceding year. The average age of these new members was 29 years and 11 months. Of the new members 1,236 were born in Germany, 877 in the United States, 343 in Austria, 243 in Hungary, 225 in Italy, and 77 in Russia. The remainder of the new members were born in various European countries and numbered from 1 (Greece) to 37 (Bohemia) per country. The number of members suspended, expelled, or withdrawn was 1,510, or 200 less than in 1922. At the end of 1923 the society had a total membership of 54,279 (45,569 male and 8,710 female members) as compared with 53,139 (44,414 male and 8,720 female members)³ at the end of 1922. The following table shows statistics of membership in 1923 by year of birth of members:

STATISTICS OF MEMBERSHIP, 1923, BY YEAR OF BIRTH

Year of birth	Number of members						
	Jan. 1, 1923	Initiated	Reinstated	Lapses	Deaths	Dec. 31, 1923	Increase or decrease
1903 to 1907.....	387	483	—	16	1	853	+466
1898 to 1902.....	1,748	703	8	98	5	2,356	+608
1893 to 1897.....	3,232	613	22	210	13	3,644	+412
1888 to 1892.....	5,055	535	29	330	18	5,271	+216
1883 to 1887.....	6,725	562	46	327	35	6,971	+246
1878 to 1882.....	7,384	307	46	206	46	7,485	+101
1873 to 1877.....	7,571	—	28	157	80	7,362	-209
1868 to 1872.....	6,998	—	15	63	94	6,856	-142
1863 to 1867.....	6,537	—	7	54	133	6,357	-180
1858 to 1862.....	4,543	—	1	31	144	4,369	-174
1853 to 1857.....	2,196	—	—	13	124	2,059	-137
1848 to 1852.....	666	—	—	2	51	613	-53
1843 to 1847.....	93	—	—	—	13	80	-13
1841 and 1842.....	4	—	—	—	1	3	-1
Total.....	53,139	3,203	202	1,507	758	54,279	+1,140

* This does not correspond to the figure given in the text but is as given in the report.

¹ Arbeiter Kranken- und Sterbe-Kasse der Vereinigten Staaten von Amerika. Solidarität, New York, March, 1924.

² For the character and make-up of this society see article on "Disability among wage earners" in MONTHLY LABOR REVIEW, November, 1919, pp. 20-39.

³ The total of the males and females is not the same as the total membership but is as given in the report.

The combined age of the 54,279 members of the society at the end of 1923 was 2,501,693 years, resulting in an average age of 46 years and 1 month per member.

Deaths.—Up to December 31, 1923, there were 753 deaths reported as against 664 in 1922. The actual number of deaths during 1923 was, however, 759, six deaths having been reported after December 31. Of the members who died during the year under review, 639 were men and 120 were women. The death rate for the year was 14 per thousand members. The average duration of membership of the members of both sexes who died in 1923 was 22 years and 4 months. In the case of male members it was 23 years and 2 months and in that of female members 22 years and 2 months. The high rate of mortality during 1923 continued in 1924, 153 deaths having been reported during the first two months of 1924.

The most frequent causes of deaths were the following: Heart diseases (164), pneumonia (72), cancer (60), Bright's disease (59), accidents (53), phthisis (41), diseases of the stomach (37), arteriosclerosis (34), diseases of the brain (25), hemorrhages (25), suicide (23), apoplexy (23), diseases of the liver (15), pulmonary edema (11), and blood poisoning (10). All the various other causes combined accounted for 101 deaths.

Sickness.—There were reported 9,568 cases of sickness of members during 1923, which involved a total disbursement of \$379,531.20 for sick benefits. The following table shows the cases of sickness and amount of sick benefits paid, by kind of sickness:

CASES OF SICKNESS AND AMOUNT OF SICK BENEFIT DISBURSED, 1923, BY KIND OF SICKNESS

Kind of sickness	Cases of sickness	Sick benefits paid	Kind of sickness	Cases of sickness	Sick benefits paid
Injuries.....	2,351	\$96,823.25	Burns.....	97	\$3,433.00
Diseases of the respiratory organs.....	839	39,414.30	Diabetes.....	43	3,100.00
Grippe.....	1,757	31,843.25	Hemorrhoids.....	70	2,920.75
Rheumatism and gout.....	620	25,084.50	Locomotor ataxia.....	11	2,126.00
Liver, stomach, and intestinal diseases.....	460	22,856.25	Debility.....	54	2,094.00
Inflammation and abscesses.....	547	19,661.25	Diseases of the skin.....	64	2,029.75
Diseases of the nervous system.....	516	18,548.25	Cold.....	111	1,817.25
Diseases of the heart.....	272	16,604.05	Hemorrhages.....	25	1,517.50
Hernia.....	180	11,087.00	Synovitis.....	25	1,296.25
Infection.....	327	10,846.25	Erysipelas.....	17	1,179.00
Paralysis.....	91	9,706.75	Varicose veins.....	19	977.00
Cancer.....	105	9,615.75	Diseases of the muscles.....	19	832.25
Appendicitis.....	131	8,130.00	Neuralgia.....	33	800.50
Nephritis.....	80	7,003.00	Anemia.....	12	759.00
Diseases of the eye, ear, and nose.....	185	6,262.25	Typhoid.....	9	644.00
Diseases of the throat.....	256	6,138.75	High blood pressure.....	7	535.50
Diseases of the brain.....	76	5,792.95	Other diseases.....	89	3,468.90
Arteriosclerosis.....	70	4,582.75	Total.....	9,568	379,531.20

Inasmuch as the society pays benefits for accidental injuries as well as for ordinary sickness, its disability experience includes all disabilities—sickness and nonindustrial and industrial accidents. From the preceding table it will be seen that, of a total of 9,568 cases of disability compensated in the year under review, 2,351, or 25 per cent, were caused by accidental injuries. The other most frequent causes of disability were the following: Grippe (1,757), diseases of the respiratory organs (839), rheumatism and gout (620),

inflammation and abscesses (547), diseases of the nervous system (516), liver, stomach, and intestinal diseases (460), infection (327), diseases of the heart (272), diseases of the throat (256), diseases of the eye, ear, and nose (185), hernia (180), appendicitis (131), cold (111), and cancer (105). None of the other diseases accounted for as many as 100 cases of disability. The table also shows that more than one-fourth of the total amount of sick benefits paid by the society in 1923 went for compensation for disability caused by accidental injuries.

Membership classes, dues, and benefits.—Membership in the society is confined almost exclusively to wage earners, and any worker of reputable character between the ages of 16 and 45 may join upon passing a satisfactory medical examination. There are four classes of membership. Membership in Classes Ia, I, and II entitles to disability and death benefits, while membership in Class III carries with it the right to receive a death benefit only.

Membership in the first three classes is confined to males. Classes Ia and I consist of male persons over 18 years of age. Class II consists of male persons 16 to 18 years of age. All new members have to pay an initiation fee which varies according to age. In Classes Ia, I, and II the members have to pay assessments fixed as a rule monthly and separately for the sick and accident fund, the mortuary fund, and the administrative fund. Members of Class III pay assessments into only the mortuary fund and the administrative fund. The following table shows the amount of the assessments paid by the four classes of members during the three years 1921 to 1923:

ANNUAL AMOUNT OF ASSESSMENTS, 1921 TO 1923, BY MEMBERSHIP CLASSES

Membership class and fund	1921	1922	1923	Membership class and fund	1921	1922	1923
Class Ia:				Class II:			
Disability fund.....	\$14.40	\$14.40	\$14.40	Disability fund.....	\$5.40	\$5.40	\$5.40
Mortuary fund.....	3.48	3.48	3.48	Mortuary fund.....	3.48	3.48	3.48
Administrative fund.....	.72	.82	1.52	Administrative fund.....	.72	.82	1.52
Total.....	18.60	18.70	19.40	Total.....	9.60	9.70	10.40
Class I:				Class III:			
Disability fund.....	8.40	8.40	8.40	Mortuary fund.....	3.48	3.48	3.48
Mortuary fund.....	3.48	3.48	3.48	Administrative fund.....	.12	.17	.52
Administrative fund.....	.72	.82	1.52	Total.....	3.60	3.65	4.00
Total.....	12.60	12.70	13.40				

Members who on account of sickness or injury are declared by the certificate of the physician recognized by their branch and the national executive board of the society to be unable to work receive, if they belong to Class Ia, \$15 per week; if they belong to Class I, \$9 per week; and if they belong to Class II, \$6 per week as sick benefit. Sick benefit at the above rates is, however, granted only for an interrupted or uninterrupted period of 40 weeks. Thereafter members of Class Ia are entitled to \$7.50, members of Class I to \$4.50, and members of Class II to \$3 per week for a further period of 40 weeks. If a member of these three classes has drawn sick benefit for a total period of 80 weeks, all further claims upon the society for sick benefits cease.

The death benefit amounts to \$250 for all four membership classes. *Finances.*—The financial statement of the society shows that in 1923 there was a surplus of income of \$179,877.23 over disbursements. The status of the various funds of the society on December 31, 1923, was:

Mortuary fund.....	\$362, 392. 33
Reserve fund.....	1, 115, 268. 10
Disability fund.....	522, 613. 79
Administrative fund.....	7, 869. 73
War risk fund.....	1, 600. 55
Total.....	2, 009, 744. 50

Of the above total, \$117,261.61 was under control of the branches and the balance under control of the national executive board.

The income from the death benefit assessments for the year 1923 was not sufficient to cover the amount of death claims incurred during the year. The convention of the society therefore increased the death benefit assessment for the year 1924.

Growth of the society.—The following table illustrates the growth of the society during the 39 years of its existence:

GROWTH OF SOCIETY AND BENEFITS PAID SINCE FOUNDATION

Year	Branches	States in which there were branches	Membership		Death benefits paid	Sick benefits paid
			Male	Female		
1885.....	2	1	116	-----	\$150. 00	\$525. 90
1890.....	41	1	2, 919	252	1, 650. 00	16, 216. 00
1895.....	128	18	10, 992	1, 924	22, 206. 00	79, 022. 50
1900.....	179	19	21, 616	4, 123	49, 716. 30	183, 649. 25
1905.....	219	22	28, 470	5, 912	81, 700. 00	210, 776. 25
1910.....	271	24	37, 343	7, 524	119, 291. 13	234, 191. 35
1915.....	339	28	43, 650	8, 347	156, 313. 69	365, 566. 85
1920.....	345	29	45, 016	8, 715	157, 306. 10	276, 818. 10
1921.....	345	29	44, 767	8, 748	150, 255. 45	310, 171. 55
1922.....	346	29	44, 414	8, 720	164, 352. 41	372, 733. 50
1923.....	347	29	45, 569	8, 710	185, 413. 16	379, 531. 20
1885-1923.....					3, 002, 815. 58	7, 581, 421. 41

Report of Industrial Commission of Illinois

THE fifth annual report of the Industrial Commission of Illinois covers the year ending June 30, 1922, but gives accident statistics for the calendar year 1921. The report contains a preliminary statement in which there is a review of the year's activities, showing the work accomplished and comparing it with that of the previous year. The statistics cover all compensable accidents, showing the number of cases in each county, the extent of disability, the cause of injury, and the number of accidents classified as to industry. It also shows the amounts paid out and the amounts still due in the various classifications.

During the calendar year 1921 there were filed with the commission reports of 43,522 compensable accidents, representing a decrease of 7,063 accidental injuries as compared with the previous year. The decrease is attributed chiefly to the general business depression, though mention is made of the increasing interest in safeguards and accident-prevention work, on the part of employees.

Of the total number of injuries reported, 498 were fatal, a decrease of 99 as compared with the previous year.

The total amount paid to employees in compensation during the year was \$4,752,981, which is a decrease of \$390,319 from the previous year. Of this amount approximately 95 per cent was paid directly to the injured employees or their dependents without any expense as to litigation, etc. In the cases where recourse was had to the courts, the ruling of the commission was for the most part confirmed and reversals were uncommon.

The total number of days lost because of injuries was 1,173,168, which is equal to the services of nearly 4,000 men for one whole year.

Coal mining led all the industries in number of accidents, having 14,422, of which 176 were fatal; the metal-products industry came next with 3,301, of which 11 were fatal; and the food, beverage, and tobacco industry, third, with 3,148, of which 41 were fatal.

The table below shows the number of injuries of each type and the amount of compensation incurred during 1921.

NUMBER OF ACCIDENTS AND COMPENSATION INCURRED UNDER ILLINOIS COMPENSATION ACT, 1921

Type of injury	Number of accidents	Benefits—			
		Compensation—		Medical and funeral	Total cost
		Paid	To be paid		
Death.....	498	\$493, 619	\$992, 680	\$5, 937	\$1, 492, 236
Permanent total disability.....	9	9, 700	48, 738	1, 376	59, 814
Permanent partial disability:					
Dismemberment.....	1, 597	722, 023	274, 942	55, 400	1, 052, 365
Loss of use.....	3, 759	1, 184, 181	137, 854	116, 570	1, 438, 605
Other.....	2, 511	372, 457	50, 641	31, 267	454, 365
Total.....	7, 867	2, 278, 661	463, 437	203, 237	2, 945, 335
Temporary disability.....	35, 148	1, 971, 001	391, 822	486, 347	2, 849, 170
Grand total.....	43, 522	4, 752, 981	1, 896, 677	696, 897	7, 346, 555

The report shows the commission is functioning smoothly as evidenced by the small percentage of cases in which the parties revert to litigation, and also by the vast amount of compensation paid directly to the injured employee at a time when it is most sorely needed.

LABOR LAWS AND COURT DECISIONS

Recovery of Damages for Wrongful Expulsion from Labor Organizations

THE Legislature of Alabama in October, 1921, passed a law providing for actions by and against unincorporated organizations or associations. Labor organizations as such are not named in the act, but by its terms it is obviously available for proceedings in which such organizations are interested.

J. W. Green was formerly a member of a local branch of the Grand International Brotherhood of Locomotive Engineers. He was expelled from the order on the ground, as far as the opinion indicates, that he had declared that his first allegiance belonged to his country at a time when a strike of the railway brotherhoods was being discussed just prior to the declaration of war between United States and Germany. This expulsion involved the loss of the benefits of two insurance policies which he had for a long time held in an adjunctive corporation, and for the expulsion and consequent loss he sued the union for damages. Judgment in his favor in the trial court had been reversed by the supreme court of the State (206 Ala. 196, 89 So. 435) on the ground that the brotherhood, being an unincorporated association, "could not be sued as such, nor in the name of the association, without more." This was prior to the enactment of the statute mentioned in the first paragraph, and subsequent to such enactment, proceedings were again instituted by service on the person designated by the brotherhood as its agent in accordance with the provisions of the statute. Judgment was again in favor of Green, from which the appeal under review was taken (98 So. 569).

The first question to be decided was as to the suability of the unincorporated association named as defendant, here appellant. The ruling of the Supreme Court in *United Mine Workers of America v. Coronado Coal Co.* (259 U. S. 344, 42 Sup. Ct. 570) as to unincorporated labor unions being "recognized as distinct entities by numerous acts of Congress and suable as such in the Federal courts upon process served on their principal officers" had been offered as supporting the present action against the brotherhood. It was held, however, that "this places liability, so far as the Federal courts are concerned, upon the statute law governing those courts," but could not be construed as affecting the correctness of the earlier decision of the Alabama Supreme Court as to actions against an unincorporated association.

This decision, however, was prior to the act of October, 1921, which, being a remedial statute and not one creating a new right of action, was competent in the present procedure affecting a prior existing cause. Whatever right Green had was neither increased nor diminished by the act, nor were the rights of the defendants affected. The act "merely affects the mode of judicial procedure," and its application to the instant case can not be denied.

The organization raised the contention that Green had not exhausted the remedy available in cases of expulsion by appealing to the general convention of the brotherhood. It was said that if his only purpose was to secure restoration to membership, it would have been necessary to prosecute his claim before the tribunal of final decision within the organization, the courts recognizing the right of organizations thus to make determinations as to their members. However, the court held that "such associations must act in good faith and must not violate the laws of the land or any inalienable right of their members." In the instant case Green was not seeking reinstatement, but "compensation in damages for the injury done to his personal and property rights by the wrongful, malicious, or wrongful and malicious, expulsion from the brotherhood." In such case, the court held the suitor need not allege or show that he has sought by appeal to avoid the decree of expulsion, since if that were reversed, he would still lack redress for damages suffered on account of that expulsion.

Another contention was that the Grand Brotherhood was not answerable for the actions of the local branch without a showing that the parent organization actually participated in or ratified the expulsion. This contention the court rejected, saying that it was the purpose of the act to cover the situation as it stood. "The privilege of association must be accepted with the burden of liability for the acts of local branches, a liability which reaches only the funds of the association, not those of its individual members, unless individual members are sued."

Upon the merits of the grounds for expulsion, it was said that a declaration of superior loyalty to the Government could not, under either any law of the brotherhood or of the land, be regarded as a sufficient cause for expulsion, so that the verdict and judgment for the plaintiff were properly allowed.

There was an added question as to the amount of damages which the jury had allowed. The plaintiff himself had accepted a reduction, the judgment of the court below being entered for the sum of \$17,500. The brotherhood still insisted that this was an excessive amount. The court held that "the complaint states a case for punitive damages," which had evidently been added by the jury to the substantial damages suffered; but it was of the opinion that the judgment was still excessive, and the judgment was reversed and remanded for further proceedings unless the plaintiff Green should remit all damages in excess of \$12,500, but if he should remit such an amount the judgment would then be affirmed.

Employment of Labor Law of Florida Held Unconstitutional

SOME mention was made in the MONTHLY LABOR REVIEW for February, 1924 (pp. 199-201), of the attitude of a number of the Southern States toward the employment of labor resulting in removal to another locality. Laws generally have made the State the unit, the acts being classed as "emigrant agent acts." The Legislature of Florida for 1923 (ch. 9297) adopted the county as the unit, directing that before any person should employ labor

to be performed in another county than the one of contract, he should present to the sheriff of the home county a written statement giving his name, the name of his employer or of the employer for whom the laborers were desired, the number of such laborers and the place at which they would work. A fee of \$1 was required. Violation entailed a fine not exceeding \$500, in default of which not more than six months' imprisonment might be required.

L. L. Messer was convicted in the county judge's court of Jackson County for undertaking to employ labor therein for service in another county without complying with this act. He challenged the constitutionality of the law, the case coming before the Supreme Court of the State on proceedings in habeas corpus (99 So. 330). Such proceedings were held to be proper where the ground of the action was the claim that no offense has been committed because the charge was based on an invalid statute. The court, with one dissent, declared the statute unconstitutional as interfering with the guaranties of liberty of persons to contract and being an "unwarranted interference with an essentially innocent exercise of liberty of contract."

No question of hours of labor, or payment of wages, or sanitary or other conditions surrounding the employment was involved. The statute undertook to restrain a resident of one county from securing the services of a resident of another county without compliance with burdensome restrictions, "which conceivably would in many instances be unreasonable and productive of no benefit." It likewise cut off avenues of employment for the laboring population in an arbitrary and unreasonable manner. Taking the view that the right of personal liberty and of private property guaranteed by the Constitution included the right to make contracts for the acquisition of property, important among which is the right to make contracts for personal employment, the judgment of conviction was declared void and the petitioner ordered discharged. The cases cited in support of this view were *Coppage v. Kansas*, 236 U. S. 1, 35 Sup. Ct. 240; *Wolff Packing Co. v. Court of Industrial Relations*, 262 U. S. 522, 43 Sup. Ct. 630; *Adkins v. Children's Hospital*, 261 U. S. 525, 43 Sup. Ct. 394, etc., in all of which the right of the freedom of contract between employers and employees was asserted.

Construction of Kansas Industrial Court Act

DESPITE the rather general impression that the industrial court act of Kansas was declared unconstitutional by the Supreme Court in the case, *Chas. Wolff Packing Co. v. Court of Industrial Relations*, 262 U. S. 522, 43 Sup. Ct. 630 (see MONTHLY LABOR REVIEW, July, 1923, pp. 208-211), its continuance as a functioning body is evidenced by a recent (November 10, 1923) decision by the Supreme Court of Kansas involving the application of the law to a strike situation. (*State v. Personett*, 220 Pac. 520.) As pointed out by the Supreme Court in the Wolff case, the point there involved was as to the power of the industrial board to fix wages in the nonessential industry involved, so that other phases of the law were not passed upon.

The point in the Personett case was as to the features of the law relative to interference with employment, making it unlawful "to engage in what is known as 'picketing' or to intimidate by threats, abuse, or in any other manner," people engaged in employment for the purpose of deterring or preventing the acceptance of or remaining in employment in the industries named, among them being common carriers. Personett was one of a group of men who had been charged with approaching and accosting an employee of the Atchison, Topeka & Santa Fe Railway Co. for the purpose of picketing, "and did picket and attempt to induce the said A. L. Smith to cease working as an employee of the above-named railway company, and did then and there threaten and intimidate" Smith for the purpose of inducing him to quit employment. It appears that Personett met Smith on the street on a holiday when none of the men were at work, and argued with him with reference to coming off the job in the repair shops of the company during the railroad strike of 1922. According to the testimony Personett introduced the subject by saying, "I hear that there is quite a bunch of you boys working, and I came down here to see what was the matter." Smith explained his desire to be loyal to his family and to the Government, taking the ground that as the United States Railroad Labor Board had made a ruling it was a "strike against the Government" which he did not care to go into. Among other statements Personett said that he "didn't know what the feeling of the boys would be that went out toward those that remained," and urged Smith to promise not to go back to work.

There was a conviction in the court below on the ground that Personett's actions were a violation of the provisions of the industrial court law above cited. It was Personett's chief contention that he was charged only with picketing and that he had not picketed within the definitions given by the authorities generally. However, the court held that the statute covered more than mere picketing, as did the information, both using language with regard to threats and intimidation. While recognizing that the ordinary definitions of picketing do not apply to the acts of Personett, the court thought that "it would seem to be just as offensive, and possibly more effective to hunt them [the workmen] up on the street or at their homes as it would be to stand in line on their approach to the shops and observe them or talk with them." The jury's interpretation of the remark about the "feeling of the boys that went out" as intending to intimidate was regarded as based on all the facts and circumstances of the case as disclosed by the evidence; so that "it would seem there was ample evidence to support the verdict."

The act was said to be an attempt to provide an amicable method to adjust labor controversies in industries affected by a public interest without the necessity of strikes; and while to accomplish this end, stringent provisions as to certain acts were embodied in the statute, there was no intention to prevent employees counseling with each other in regard to their interests, nor to prevent one from quitting his employment if he desired to do so. On the other hand, the man who wants to work must be permitted so to do without being interfered with in any way or conspired against or intimidated.

A point was made of the fact that the employing railway company is an interstate common carrier, not under the supervision of the court

of industrial relations. The court ruled that it also did intrastate business, and furthermore that the statute applies to offenses within the State, which are necessarily subject to State laws.

Special interest attaches to the foregoing decision by reason of the fact that it was rendered in the interval between two decisions of the Supreme Court of the United States, the one referred to in the first paragraph of this article and one of March 10, 1924, reversing a somewhat earlier decision of the Supreme Court of Kansas. This last-noted decision (*State v. Dorchy*, 112 Kan. 235, 210 Pac. 352) was an affirmation of a conviction for a violation of the industrial court act.

Alexander Howat and August Dorchy were president and vice president, respectively, of District No. 14, United Mine Workers of America, and were found guilty of calling a strike at a coal mine in the territory of that district. From his sentence of six months' imprisonment and a fine of \$500 and costs, Dorchy appealed, claiming that rights guaranteed under the laws and the Constitution of the United States had been violated. The court declared that the case was controlled by its earlier opinions in *State ex rel. v. Howat*, 109 Kan. 376, 198 Pac. 686, and *Court of Industrial Relations v. Wolff Packing Co.*, 109 Kan. 629, 201 Pac. 418; and on the authority of these decisions the conviction by the court below was affirmed. It must be kept in mind that it was the wage-fixing feature of the last-named case that was declared unconstitutional by the Supreme Court in the decision in the *Wolff Packing Co.* case; but as the decision on this appeal was rendered some months prior to that determination it was naturally still held to be a precedent.

Dorchy procured the transfer of his case to the Supreme Court on a writ of error, securing a reversal of the judgment in order to permit the Supreme Court of Kansas to construe the law in the light of the Supreme Court decision in the *Wolff Packing Co.* case. Mr. Justice Brandeis delivered the opinion of the court, in which all concurred. (*Dorchy v. Kansas*, 44 Sup. Ct. 323.) A brief summary of the terms of the act was first presented, section 19 providing that any officer of a union of workmen engaged in an industry covered by the act who willfully uses his official position to influence others to violate the act may be punished by fine or imprisonment or both. It was under this section that Dorchy had been prosecuted for calling a strike in a coal mine, such action being specifically prohibited by the law. The contention was made that the section was void because it prohibits strikes, thus denying the liberty guaranteed by the fourteenth amendment. Mr. Justice Brandeis pointed out that the system of compulsory arbitration contained in the act was, as applied to packing plants, in violation of the Federal Constitution, adding that for the same reasons "it is unconstitutional as applied to the coal mines of that State." The question suggested itself whether section 19 has not, therefore, "necessarily fallen as a part of the system of compulsory arbitration." If such were the case there would be no occasion to consider specific objections, but "a statute bad in part is not necessarily void in its entirety. Provisions within the legislative power may stand if separable from the bad." Whether or not this section can stand alone, or whether it is so interwoven with the unconstitutional parts that it must fall with them "is a question of interpretation and of legislative intent." The duty of determining the intent of the State legislature rests primarily upon the State court, and "its decision as to the

severability of a provision is conclusive upon this court." In the absence of a controlling State decision the Supreme Court may "in passing upon the claim under the Federal law decide also the question of severability. But it is not obliged to do so."

It was then pointed out that the Kansas court had already to some extent considered the effect of the decision in the Wolff Packing Co. case on other sections of the act, the case in question being *Court of Industrial Relations v. Chas. Wolff Packing Co.* (October 6, 1923), 219 Pac. 259. This was a proceeding on motion to modify the earlier judgment of the court so that it might conform with the decision of the Supreme Court, in which the State court held that the order of the court of industrial relations remained in force in part. The court reviewed each paragraph of the order of the court of industrial relations, striking out those that related to the fixing of wages, but denying the motion to strike out other paragraphs relating to hours of labor and weekly rest periods. On a rehearing the judgment then rendered was modified, but the final result was objected to by the packing company and the action of the State court has been brought to the Supreme Court for review by proceedings entered February 16, 1924, but not yet disposed of.

Mr. Justice Brandeis, after stating the above, announced that the question of the validity or invalidity of section 19, not having been passed upon as yet by the State court, would be referred to it by an order vacating the judgment in the Dorchy case so that it might be considered in the light of the Supreme Court's decision in the Wolff Packing Co. case.

It is obvious from the above that the status of the industrial court act is not yet settled, but with the interpretation that the Supreme Court of Kansas may arrive at, and the action by the Supreme Court on review of the modification of the orders in the Wolff Packing Co. case, it would seem that a final determination is near at hand.

Right of Picketers to Access to Public Wharves

AN ACT of the Louisiana Legislature of 1896 (Act No. 70), last amended by Act No. 14, 1915, provides for a board of commissioners of the port of New Orleans, with authority to police the docks and wharves along the riverfront. During a strike in the autumn of 1923 this board issued an order prohibiting all persons "from entering or using the public wharves during the present strike unless it be on business in connection with the commerce and navigation of the port." Though general in terms, the occasion of the order was the action, through their presidents and members, of the labor organizations into which the stevedores, longshoremen and screwmen of the port were formed. These organizations, four in number, appeared by their presidents and various members, asking an injunction against the enforcement of this order. This was allowed by the court below and applications for rehearing or a new trial denied. The case was then brought to the Supreme Court of Louisiana seeking an annulment of the order and a writ of injunction, which the court granted. (*Keegan v. Board of Commissioners of Port of New Orleans*, 98 So. Rep. 50.)

[1140].

The opinion of the court set out the statutes giving the board of commissioners authority over the wharves and landings and the river front of the city, their powers being pronounced as complete as the municipal council has ever had. In view of this the court would have no more authority to prevent the execution or enforcement of a police regulation enacted by the board than to prevent a like enforcement of a police regulation enacted by the municipal council. The board was responsible for "determining what precautions should be taken to avoid the danger of allowing men arrayed on opposite sides of a labor strike to assemble on the wharves and docks along the river front, in close proximity to the ships in port." The principles governing picketing laid down in *Truax v. Corrigan* (257 U. S. 340, 42 Sup. Ct. 124) were referred to, and the opinion expressed that the board had not exceeded its authority or abused its trust.

The police regulation complained of in this case, being enforced only during the strike on the river front, is not an abuse of the police power of the board of commissioners of the port. It does not invade any vested right or immunity of the plaintiff's in this suit.

The order and writ of injunction were therefore annulled, leaving the board's order of exclusion in effect.

Power of City to Regulate Wages and Hours on Public Works

THE city of Detroit, Mich., by ordinance established the number of working hours per day and days per week, and a minimum daily wage for workmen employed by the city or by contractors "for any public work" on behalf of the city. The constitutionality of this enactment was challenged by various contractors, and a case reached the supreme court of the State on the point that it was in violation of the State constitution, such enactment being beyond the power of the municipality. This view was taken by the court below, and by the supreme court on appeal, the ground being taken that the general police power rests in the State, and neither the constitution nor "the home rule act" of the State gave the city the power to make such far-reaching requirements. As to local activities and matters of local concern, the municipality has functions with which the State can not interfere; but "in matters of public health, of police, and numerous other activities, the municipality acts as an agent of the State," but "it may not as such agent fix for the State its public policy. * * * The compulsory rate-making power rests in the State."

The conclusion was reached that "in the provisions under consideration the city has undertaken to exercise the police power not only over matters of municipal concern, but also over matters of State concern," so that "the entire provision under consideration must fall." (*Attorney General v. City of Detroit*, 196 N. W. 391.)

Constitutionality of New York Statute Fixing Hours of Labor of Women

AN ACT of the New York Legislature of 1917 (ch. 535) undertook to fix the hours of labor of women in restaurants in cities of the first and second class. This act prohibited their employment between the hours of 10 p. m. and 6 a. m., besides fixing a nine-hour day and a week of 6 days or 54 hours. Joseph Radice, a restaurant keeper in the city of Buffalo, was found guilty of violating the law by employing women between the prohibited hours at night. His contention was that the fourteenth amendment was violated by depriving the employer and employee of their liberty of contract and also by making an unreasonable and arbitrary classification. The New York courts were at one in finding the employer guilty, the court of appeals affirming the judgment without an opinion. The case was finally brought to the Supreme Court, where the judgment of the State courts was affirmed. (*Radice v. People of the State of New York* (March 1, 1924), 44 Sup. Ct. 325.)

Mr. Justice Sutherland delivered the opinion of the court, saying as to the contention that the law interfered with the liberty of two adult persons to contract:

The answer of the State is that night work of the kind prohibited, so injuriously affects the physical condition of women, and so threatens to impair their peculiar and natural functions, and so exposes them to the dangers and menaces incident to night life in large cities, that a statute prohibiting such work falls within the police power of the State to preserve and promote the public health and welfare.

The information on which the legislature acted led it to the conclusion "that night work is substantially and especially detrimental to the health of women. We can not say that the conclusion is without warrant." Earlier decisions of the court were then cited, notably *Muller v. Oregon*, 208 U. S. 412, 28 Sup. Ct. 324, in which the 10-hour law of Oregon was upheld on the ground that the physical structure and the functions of the two sexes justified legislation for women in a field in which the laws might not be sustained if applicable to men. The case of *Adkins v. Children's Hospital*, 261 U. S. 525, 43 Sup. Ct. 394, was distinguished. This was a case in which the minimum wage law of the District of Columbia was declared unconstitutional, Mr. Justice Sutherland delivering the opinion. It was pointed out that the statute in that case "was a wage-fixing law, pure and simple. It had nothing to do with the hours or conditions of labor."

The second contention as to the denial of the equal protection of the laws involved two points: (a) That the act discriminates between cities of the first and second class and other cities and communities; and (b) that it excludes from its operation women employed in restaurants as singers and performers, attendants in ladies' cloak rooms and parlors, as well as employees in dining rooms and kitchens of hotels and in lunch rooms or restaurants conducted by employers solely for the benefit of their employees. The first contention was rejected on the authority of earlier decisions, the principal one being *Hayes v. Missouri*, 120 U. S. 68, 7 Sup. Ct. 350, in which it was said that the fourteenth amendment does not prohibit legislation which is limited either in the objects to which it is directed or by the

[1142]

territory in which it is to operate, but it merely requires that all persons subjected to such legislation shall be treated alike under like circumstances and conditions.

As to the exclusion of persons in special establishments or institutions, it is pointed out that "the mere production of inequality is not enough. Every selection of persons for regulation so results, in some degree. The inequality produced, in order to encounter the challenge of the Constitution, must be 'actually and palpably unreasonable and arbitrary.'" Quoting from *Bosley v. McLaughlin*, 236 U. S. 385, 35 Sup. Ct. 345, it was said that legislation "may 'proceed cautiously, step by step,' and 'if an evil is specially experienced in a particular branch of business' it is not necessary that the prohibition 'should be couched in all-embracing terms.'"

The act was therefore sustained and the judgment below affirmed.

Labor Legislation in Canada, 1923

THE Department of Labor of Canada publishes every five years a compilation of the labor legislation of Canada, annual supplements showing the legislation for intervening years. The compilation for the year 1923 shows the principal measures enacted by the Dominion Parliament and the legislatures of the several Provinces during the year. The enactments are for the most part amendatory or supplementary to existing legislation, but new laws may be noted in a few fields.

Dominion of Canada

CHAPTER 9 of the acts of 1923 is entitled the "Combines investigation act," relating to the subject of combines, monopolies, trusts, and mergers. The general purpose of the act corresponds to the antitrust law of the United States, but embraces a number of different features. It is directed against such activities as are supposed to be likely to operate to the detriment of the public and provides for investigations on the sworn complaint of at least six persons. The act is not to be construed as applying to combinations of workmen or employees for their own reasonable protection.

The subject of Chinese labor was considered in a revision (ch. 38) of the Chinese immigration act, undertaking a more effective restriction of such immigration. The head tax is abolished and the right to enter is restricted to certain defined classes. The change particularly affects the provisions relating to the merchant class, the minister of immigration and colonization being given discretionary power to make restrictions governing registration and identification of Chinese immigrants. All Chinese in Canada are required to register without delay.

Alberta

THE legislation for Alberta is entirely amendatory, and chiefly of minor importance. The wages of public employees as regulated by the civil service garnishment act are exempt to the amount of \$75 instead of \$25 as under the earlier law, debts for board and lodging not being within this provision (ch. 5).

Two statutes (chs. 28, 36) amend laws on the subject of the liability of employers for the taxes of employees, providing penalties for

employers failing to deduct town and school taxes, respectively, from the wages of their workmen.

British Columbia

THE laws relating to the inspection and regulation of factories and of coal mines are amended, the first advancing the definition of a "child" to 15 years for both males and females instead of 14 for males and 15 for females under the earlier law (ch. 12); while the accident reporting law for coal mines requires the report in the event of certain occurrences whether or not personal injury or disablement is caused (ch. 47). These cases include the ignition of gas or dust underground or fire underground, the breakage of ropes, chains, etc., by which men are hoisted or lowered, the overwinding of cages, the inrush of water from old workings, or any other dangerous occurrence.

Of outstanding interest is the hours of work act (ch. 22), which fixes an 8-hour day and 48-hour week for industrial undertakings generally, including mining, factories, logging, construction work, tunnels, bridges, telephonic and telegraphic installation. Agriculture, horticulture, and dairying are excluded, as are persons in supervisory or confidential positions. Work may be adjusted so as to permit more than 8 hours on one or more days, but by not more than 1 hour, nor may the weekly limit exceed 48 hours. In cases of accidents, urgent work to be done to machinery or plant, or cases of force majeure variations from this rule may be permitted. In continuous processes requiring 7-day work a 56-hour week is allowed. This act is to take effect January 1, 1925.

A similar law was enacted in 1921, to be effective on proclamation, when other Provinces had passed like laws, but the present law is effective without condition.

Manitoba

THE law of Manitoba regulating the licensing of moving-picture operators is amended (ch. 1), adding a requirement that no proprietor may allow any film or slide to be exhibited in his theater unless the operator holds a license under the law.

The law as to employment offices is amended (ch. 10) by striking out the section forbidding fees or compensation for giving employment service, and substituting therefor a prohibition against any person, corporation, or association operating any employment agency as his or its business or occupation with or without charge, or in any way undertaking to give information regarding employers seeking workers or workers seeking employment. The employment branches of business organizations seeking help for their own business are not affected by this prohibition.

New Brunswick

THE law relating to the early closing of shops formerly authorized the city authorities to order closing at 6 p. m. in any particular line of business on receipt of a petition signed by two-thirds of the persons engaged in such line of business. This was changed (ch. 21) so as to require the signature of three-fourths of the persons interested.

A new law (ch. 27) provides for a system of vocational education with local funds and Government aid.

Nova Scotia

THE retirement of employees in the public service is provided for (ch. 5) on a contributory basis. The amount of this allowance is calculated on the average yearly salary during the last three years of service, varying with the length of service, with a maximum of thirty-five fiftieths of the salary, not exceeding \$3,000 in amount. The age of 65 is fixed for those who have served at least 10 years continuously. If a retired employee dies, leaving a wife, one-half his allowance is paid to her for life or until her remarriage. Provision is also made for children under 18.

Employment in coal mines is affected by an amending act (ch. 54), which repeals a provision regulating the employment of boys between 12 and 16, and forbids the employment of any boy under the age of 16 in or about any mine.

Ontario

THE principal statute reproduced is a revision of the law relating to mechanics' and wage earners' liens (ch. 30).

The workmen's compensation act is amended (ch. 31) so as to fix a minimum rate of \$12.50 per week where the dependents are a wife or an invalid husband and one or more children. This does not affect awards made prior to the coming into effect of the act.

Other amendments relate to voting by railway employees and commercial travelers (ch. 44), the licensing of chauffeurs (chs. 48, 49), and the granting of a pension to municipal employees of 20 years' service instead of a lump-sum gratuity.

Other Provinces

IN THE other Provinces (Prince Edward Island, Quebec, Saskatchewan, and Yukon Territory) no session was completed during the year, or no enactment of sufficient importance to require noting here was passed.

Italian Decree Placing Labor Organizations Under Government Control¹

BY A decree issued January 24, 1924, the Italian Government has put all labor organizations under the supervision of the provincial authorities. Briefly summarized, the provisions of the decree are as follows:

All associations or corporations, of whatever nature and designation, which derive the funds required for their activities wholly or in part from fixed or varying contributions of workers made voluntarily or imposed by the by-laws, and whose object is to give to workers economic or moral aid, are subject to the supervision of the provincial authorities.

When there is reason to suspect an abuse of confidence or unauthorized grants or transfers of funds to the detriment of the members or for purposes other than economic or moral aid of the workers, the prefect of the Province will have power to order an inspection or inquiry into the activities of the association or corporation, to over-

¹ Confederazione Generale del Lavoro. Battaglie Sindacali, Milan, Feb. 14, 1924.

rule or set aside its acts, and, in cases of a serious nature, to dissolve the administrative council and intrust the control of the social funds for a period not exceeding one year to a commissioner whose duty it shall be to take steps for the preservation of the funds and all other measures necessary for the well-being of the association or corporation.

An appeal from the decision of a prefect who has acted in any of the above mentioned cases may be made to the Minister of the Interior, whose decision may in turn be contested, through the proper legal channels, before the Council of State. In the event of a commissioner being appointed to control the funds of the organization, he will be required to furnish a detailed report on the financial situation of the organization and any irregularities which may be brought to light. After consultation with the parties interested, if such consultation seems necessary to him, the prefect will determine, by a decree which must show his reasons therefor, whether or not financial control shall be continued, or whether the funds shall be liquidated.

The decree also embodies clauses relating to the liquidation and ultimate disposal of the capital of such associations and the transfer of the balance to certain persons or institutions. It is further provided that if any prefect has, previous to the going into force of the present decree, taken any of the measures indicated in this decree, for reasons of public order and security, he shall within five days after the going in force of the decree approve or revoke these measures.

The decree went into force on the day of its publication in the *Gazzetta Ufficiale* (February 6, 1924).

Protests of Workers' Organizations

THIS new decree was strongly criticized at a special meeting of the administrative council of the Italian General Confederation of Labor, held in Milan on February 9 and 10, 1924.

The administrative council declared that the provisions of the decree of January 24, 1924, did not at all correspond with the assurance given by the Prime Minister to the representatives of the confederation, to the effect that the administration of trade-union organizations would not be subjected to Government interference. Although the affiliated trade-unions had nothing whatever to fear from a control of their administration, the council considered that outside intervention, especially when made by the public authorities, was an arbitrary measure encroaching on trade-union autonomy, as trade-union organizations, like all other private bodies, were responsible for their acts only to their members. The only intervention tolerable was that of the judicial authorities when appealed to by members or third parties in the protection of their rights or interests.

The council therefore formally protested against all Government interference in the internal administration of trade-union organizations, as being unconstitutional. Moreover, as the decree in question affected only workers' organizations and passed over the employers' associations, the council considered it an attempt to strike at the labor movement, and denounced it to the working class and public opinion.

A resolution protesting against the decree was also adopted by the Italian Workers' Federation (Catholic) at a meeting held on February 22, 1924.

LABOR ORGANIZATIONS AND CONGRESSES

International Conference on Labor Statistics ¹

THE International Conference of Labor Statisticians called by the International Labor Office was held at Geneva from October 29 to November 2, 1923. Invitations to this meeting were accepted by 33 countries. The 52 delegates in attendance included the heads of the statistical departments of the ministries of labor of various Governments, the directors of statistical offices, chief factory inspectors, and other experts qualified to deal with statistical problems.

The following were the only items on the agenda of the conference:

- (a) The classification of industries and occupations for the purposes of labor statistics.
- (b) Statistics of wages and hours of labor.
- (c) Statistics of industrial accidents.

The meeting was convened not only for the consideration of these subjects, but to reach an agreement, if possible, as to the methods and standards which should be adopted by the various countries to render their labor statistics more uniform, with a view to facilitating international comparisons.

Three committees were organized, one for each subject on the agenda.

Experts from the statistical section of the International Labor Office had prepared reports ² analyzing and summarizing the statistical methods of various Governments, which were made available to the committees.

The following resolutions were adopted by the conference:

A. CLASSIFICATION OF INDUSTRIES AND OCCUPATIONS

(1) Occupied persons should be classified in the first instance according to the industry in which they are employed, and within each industry they may be further classified according to their individual occupations. When it is not possible to give this double classification in sufficient detail to show the total number of workers in each individual typical occupation, it is necessary to make a second classification of all occupied persons according to their individual occupations, so that for comparative purposes two separate classifications will be available, (a) by industry and (b) by individual occupation.

(2) Industries should be classified into the following main divisions:

(a) Primary production: Agriculture, pasturing, forestry, hunting, fishing, etc.; mining, quarrying, etc.; i. e., extraction of minerals.

(b) Secondary production: Manufacturing industries, etc.; i. e., the transformation or modification of materials, together with the construction of buildings, roads, etc., and the repair of finished products.

(c) Services: Transport and communication; commerce, finance, and trade; public administration and defense; professional services; domestic service and personal services for which remuneration is paid, supply of board and lodging.

(3) In classifying manufacturing industries the establishment considered as a technical unit should be taken as basis.

¹International Labor Office, *Industrial and Labor Information*, Geneva, Nov. 9-Dec. 28, 1923, pp. 7-11; *International Labor Review*, Geneva, January, 1924, pp. 3-30.

²Published later by the International Labor Office as three separate pamphlets in its series of studies and reports: Series N (statistics), Nos. 1 to 3, Geneva, December, 1923.

(4) In the absence of an agreed classification of industries and as a preparation for such a classification, and in order to facilitate international comparison, the groupings of industries used in the different countries should be so subdivided that it would always be possible to secure separate information concerning an adequately complete number of industries included in a provisional list drawn up in alphabetical order, which might be prepared by the International Labor Office after consultation with any statistical services or organizations which might usefully assist in this work.

(5) It is desirable for purposes of international comparison that each country should publish definitions of the occupational, industrial, and other terms most commonly used in that country in connection with its labor statistics.

B. STATISTICS OF WAGES AND HOURS OF LABOR

Detailed statistics of rates of wages, of actual earnings, and of normal and actual hours of labor should be collected and published in each country as frequently as possible, account being taken of the special circumstances and conditions obtaining in each case. With a view to facilitating international comparisons, the responsible authorities in each country should, as far as practicable, observe the following principles:

(1) At regular intervals, and at least once a year, there should be published:
 (a) Statutory minimum rates.
 (b) Rates fixed in collective agreements.
 (c) Rates accepted by organizations of employers and workpeople for typical categories of workers.

(2) In order to provide an indication of the general course of wage movements, information should be published at more frequent intervals as to the nature and amount of any changes resulting from alterations in the statutory minimum rates or arranged between organizations of employers and workpeople. Particulars should be given of changes in the normal hours of labor and of alterations in the level of piecework rates.

(3) At regular intervals, not less than once a year, average actual earnings and actual hours of labor during a year or a typical period in a year should be given for each of the principal industries, and based on data supplied by representative employers or establishments.

(4) From the data indicated above, index numbers should be computed to show the general course of changes in nominal wage rates and in actual earnings. Index numbers of the purchasing power of the wages should also be calculated by relating changes in actual earnings to changes in the cost of living, the necessary precautions being taken to ensure that the two series of data are comparable.

The nominal wages employed in computing the index numbers should be given in every case.

(5) At less frequent intervals general wage censuses should be taken, information being obtained from the pay sheets of establishments to show rates of wages and the actual earnings in a typical week. The information should be given by industries, districts, occupations, and sex, and a distinction should be made between adults and young persons.

Until the principles enunciated above have been applied in the different countries, statistics of wages and hours of labor should at least give:

(a) Current rates of wages (hourly or weekly) and normal hours of work of typical categories of time workers; and at regular intervals averages weighted according to the number of workers to whom the data apply both for such categories and for all categories combined;

(b) Actual and full-time earnings and hours of labor for typical categories of workers, especially those paid on piecework. Such statistics should be available for sample periods, at least once a year;

(c) Real wage index numbers based on nominal wage and cost of living index numbers.

C. STATISTICS OF INDUSTRIAL ACCIDENTS

(1) *Classification of industrial accidents*

Industrial accidents should be classified according to the industry of the injured worker, the cause of accidents, the extent and degree of disability, the location of the injury, and the nature thereof.

(a) The classification of industrial accidents according to the industry of the injured worker should conform to the list indicated in paragraph 4 of the resolution concerning the classification of industries, with such subdivisions as will allow special consideration to be given to industries with a relatively high accident rate.

(b) The classification of accidents according to the cause of accident should as far as possible be in accordance with the table given below, with such subdivisions as may be considered necessary.

(i) Machinery:

- (a) Prime movers.
- (b) Transmission machinery.
- (c) Lifting machinery.
- (d) Working machinery.

(ii) Transport:

- (a) Railways.
- (b) Ships.
- (c) Vehicles.

- (iii) Explosions; fire.
- (iv) Poisonous, hot, or corrosive substances.
- (v) Electricity.
- (vi) Falls of persons.
- (vii) Stepping on or striking against objects.
- (viii) Falling objects.
- (ix) Falls of ground.
- (x) Handling without machinery.
- (xi) Hand tools.
- (xii) Animals.
- (xiii) Miscellaneous.

(c) In the classification of accidents according to the extent and degree of disability a distinction should be made between fatal and nonfatal accidents and between temporary and permanent disabilities.

Temporary disabilities should be classified according to duration and uniformity should be obtained by using the following groups: (i) 2 weeks or less; (ii) over 2 and up to 4 weeks; (iii) over 4 and up to 13 weeks; (iv) over 13 weeks and up to 6 months; (v) over 6 months and up to 1 year; (vi) over 1 year and up to 2 years; (vii) over 2 years and up to 3 years.

Permanent disabilities should be classified by degree and uniformity should be obtained by using the following groups: (i) Under 20 per cent disability; (ii) 20 and under 40 per cent; (iii) 40 and under 60 per cent; (iv) 60 and under 80 per cent; (v) 80 and under 100 per cent; (vi) 100 per cent.

Permanent disabilities should be classified at the time they are recognized as such.

(d) The location of injury should be clearly distinguished from the nature of the injury. The most suitable classification is that of the common anatomical divisions of the body, namely: (i) The head; (ii) trunk; (iii) upper extremities; (iv) lower extremities; (v) general.

Each of this [these] groups should be subdivided if necessary.

(e) The nature of the injury should be classified as follows: (i) Contusions and abrasions; (ii) burns and scalds; (iii) concussions; (iv) cuts and lacerations; (v) punctured wounds; (vi) amputations; (vii) dislocations; (viii) fractures; (ix) sprains and strains; (x) asphyxiation; (xi) drowning; (xii) other injuries.

NOTE.—In publishing the above statistics a note should be added on the following points:

- (a) The scope of the legislation;
- (b) The system of insurance (compulsory or optional);
- (c) The nature of the accidents included;
- (d) The methods of reporting the accidents and of compiling the statistics;
- (e) A summary of the benefits given to the injured or to their dependents.

In countries in which industrial diseases are compensated as accidents they should, wherever possible, be distinguished separately in the tables.

(2) Accident rates

For industrial and international comparison it is essential to calculate frequency rates and severity rates.

(a) The frequency rate should, if possible, be calculated by dividing the number of accidents (multiplied by 100,000) by the number of hours of working time.

(b) The severity rate should similarly be calculated by dividing the number of working hours lost (multiplied by 100,000) by the number of hours of working time.

Where practical difficulties prevent the calculation of the number of hours of working time, this number should be replaced by the number of full-time workers (i. e., the number of working-days divided by 300) or the average number of workers, as may be best suited to the economic and social needs of the country or industry concerned.

RECOMMENDATIONS ADOPTED BY THE CONFERENCE

In order that the International Labor Office may make tentative comparisons of the level of real wages in the different countries, the competent statistical authorities of each country, should, as from January 1, 1924, furnish the International Labor Office at regular intervals (if possible monthly) with statements, in a form to be agreed upon, showing for the capital cities of their respective countries:

(a) The time rates of wages and normal weekly hours of labor current in a limited number of typical occupations, and

(b) Information as to the prices of a limited number of those items upon which the income of working-class families in most industrially developed countries is largely spent.

It is hoped that countries, in which compensation is invariably paid in the form of pensions, will forward for compilation by the International Labor Office the necessary details for the determination of the mortality rates among persons injured in industrial accidents, so as to establish the degree in which this mortality is influenced by the age of the pensioner, by the time elapsing since the conclusion of medical treatment, and by the extent of industrial capacity.

The chief officers elected by the conference were: President, Armand Julin, the secretary general of the Belgian Ministry of Industry and Labor; vice presidents, R. H. Coats, F. R. S. C., Dominion statistician, Canada; Luigi Solinas, director general of labor, Ministry of National Economy, Italy; and Doctor Platzer, director of the Federal Statistical Office, Germany.

Congress of International Federation of Intellectual Workers ¹

THE International Federation of Intellectual Workers held its second general meeting in Paris, December 27-29, 1923.

Delegates from the following 9 countries having federations of intellectual workers were in attendance at the congress: Austria, Belgium, Bulgaria, Czechoslovakia, Finland, France, Great Britain, Rumania, and Yugoslavia. The Swiss delegate was unable to take part in the sessions. Representatives from 10 other countries in which the organization of intellectual workers is in progress followed the proceedings.

After reporting on the development of the movement for the organization of intellectual workers, the convention adopted the constitution for the international federation of such workers.

Some of the questions which it was agreed should be investigated in the interest of intellectual workers are given below:

- (1) The position of civil servants in different countries.
- (2) Intellectual property rights.
- (3) The protection of professional titles.
- (4) Revision of the protection of inventions and of clauses assigning the ownership of inventions or plans to employers.

¹ International Labor Office. Industrial and Labor Information, Geneva, Jan. 28, 1924, pp. 24, 25.

- (5) The organization of international means for the placing in employment of intellectual workers.
- (6) The improvement of the methods of intellectual work; the assistance to be granted to important intellectual associations and institutions.
- (7) Collective agreements and model agreements.
- (8) The position of various information offices, with a view to the future encouragement of international exchange and foreign travel of intellectual workers.
- (9) Intellectual credit, etc.

Conference of International Federation of Trade-Unions and International Trade Secretariats¹

IN ACCORDANCE with a decision of the management committee of the International Federation of Trade-Unions at its meeting of August 3 and 4, 1923, a conference of the committee and the secretaries of the international trade federations was held in Amsterdam on November 8 for the purpose of defining the relations between the International Federation and the international secretariats and of settling questions of organization and affiliation.

The following resolution, which had been unanimously adopted by the management committee, was submitted to the representatives of the international secretariats:

(1) The international trade secretaries shall participate in the international trade-union congresses; they may take part in the discussions in a consultative capacity.

(2) Every two years the Bureau of the I. F. T. U. shall hold a two days' conference with the international trade secretaries. This conference shall be held immediately before the biennial congress of the International Federation of Trade-Unions.

The conference will deal chiefly with the following questions:

(a) The manner in which relations with the I. F. T. U. can be strengthened and the changes that should be made in regard to these relations in view of the industrial development in the various countries.

(b) The carrying out of the decisions of the international trade-union congresses.

(c) The manner in which the press service of the international trade secretariats can be developed and improved with the cooperation or assistance of the I. F. T. U.

Such difficulties as may arise in the periods between the conferences shall be dealt with by the management committee of the I. F. T. U.

(3) The conference shall elect a commission consisting of three representatives of the international trade secretariats who shall represent the international trade secretariats on the management committee of the I. F. T. U. and shall take part both in the discussions and in the voting.

(4) The international trade secretariats pledge themselves not to take final decisions in regard to general questions which lie outside the domain of their respective trades, or in regard to special questions affecting the interests of the other trade-union organizations, without first consulting with the management committee of the I. F. T. U. or at least with the Bureau of the I. F. T. U.

(5) It shall be a fundamental principle that only the following organizations may affiliate with an international trade secretariat:

(a) Organizations which are affiliated with their respective national trade-union centers, which in turn are affiliated with the I. F. T. U.

(b) Organizations which are in no way associated with any other international (e. g., organizations belonging to the Norwegian Federation of Trade-Unions, which federation is not affiliated with any of the existing internationals).

¹ International Labor Office. Industrial and Labor Information, Geneva, No. 9-Dec. 28, 1923, pp. 13-15.

- (c) Organizations which belong to a nonaffiliated national trade-union center, which does not make propaganda against the I. F. T. U. (e. g., organizations belonging to the American Federation of Labor).
- (d) Organizations not affiliated with their national trade-union center, if this latter belongs to a trade-union international which is opposed to the I. F. T. U.

Articles 1 to 4 were adopted, but article 5 gave rise to discussion. On a record vote, 14 of the secretariats represented at the conference expressed themselves in favor of the conditions laid down in article 5, and 6 were against them. This vote is, however, merely provisional, the final decision lying with the international trade-union congress of 1924, and the conference of the international trade secretariats which will take place at the same time. Until then the executive committees of the trade secretariats have sufficient time to decide their attitude to the proposals of the management committee of the International Federation of Trade-Unions.

Trade-Union Statistics of the Netherlands, January 1, 1923¹

ACCORDING to statistics on the trade-union movement in the Netherlands recently published by the Central Statistical Bureau of that country the Dutch trade-union organizations have suffered a steady loss in membership since 1920. The trade-union movement reached its peak on January 1, 1920, when the total number of organized wage earners was 683,468. One year later, the membership had fallen to 651,215, on January 1, 1922, to 640,044, and on January 1, 1923, to 571,973. This gradual loss in membership was due chiefly to extensive unemployment. During the year 1922 the organizations of manual workers suffered the greatest loss in members, their membership falling from 381,380 to 324,435; the membership of organizations of public service employees, including manual workers, fell from 208,814 to 199,175; and that of private salaried employees from 49,850 to 48,363.

On January 1, 1923, the great majority, 446,066 or 78 per cent, of the organized wage earners of the Netherlands were affiliated with one of the existing five central labor organizations, while the remainder belonged to unaffiliated federations, cartels, and local unions. The membership of the five central organizations during the period 1914 to 1923 is shown in the following table:

MEMBERSHIP OF FIVE CENTRAL TRADE-UNION ORGANIZATIONS OF THE NETHERLANDS, 1914 to 1923

Central organization	Membership on January 1—				
	1914	1920	1921	1922	1923
National Labor Secretariat of the Netherlands.....	9,697	51,570	37,125	31,391	23,280
Federation of Dutch Trade-Unions.....	84,261	247,748	216,617	217,467	196,806
National Federation of Christian Trade-Unions.....	11,023	66,997	73,819	71,332	61,365
Federation of Dutch Catholic Trade-Unions.....	29,048	141,002	146,030	142,035	117,115
General Federation of Dutch Trade-Unions.....	3,864	39,903	52,223	49,570	47,500
Total.....	137,893	547,220	525,814	511,795	446,066

¹ Netherlands. Ministerie van Binnenlandsche Zaken en Landbouw. Centraal Bureau voor de Statistiek. Statistiek van Nederland No. 373. Overzicht van den omvang der Vakbeweging op January 1, 1923. The Hague, December, 1923. 56 pp.

From the preceding table it will be seen that the Federation of Dutch Trade-Unions is leading all the other central labor organizations by a wide margin as regards membership. The Federation of Catholic Trade-Unions has the next largest number of members and the Federation of Christian Trade-Unions holds third place. The membership of the General Federation of Dutch Trade-Unions is composed chiefly of employees in public service and private salaried employees. The Federation of Catholic Trade-Unions suffered the relatively largest loss in membership (24,920) during 1922.

It has already been stated that 324,435 of the 571,973 wage earners that were organized in the Netherlands on January 1, 1923, were manual workers. The trades and occupations most strongly organized were the building trades (60,866), metal workers (45,123), workers employed in fishing, commerce, and transport (40,558), workers in the food industries (37,435), agricultural workers (25,858) and textile workers (22,671).

Financial data are available for trade-unions having a membership of 523,665, representing 86.5 per cent of all organized wage earners. The receipts of these unions amounted in 1922 to 13,795,158 florins,² the receipts from dues alone being 11,175,228 florins. The expenditures for the same year totaled 12,601,570 florins, the principal items being 2,360,913 florins for strike benefits, 959,327 florins for sick and death benefits, 1,024,916 florins for trade-union journals, and 2,221,897 florins for salaries. The unions covered by the financial report had a combined capital of 10,429,782 florins on December 31, 1922.

² Florin at par = 40.2 cents. Exchange rate varies.

PROFIT SHARING

Profit Sharing in France

THE French Ministry of Labor has recently completed a study¹ of profit sharing in France. The inquiry was made because a number of bills had been introduced in the National Assembly to make profit sharing compulsory and it seemed advisable to the Government to secure official information as to the present status and results of profit sharing.

No legislation has been enacted in France regarding the sharing of profits in industrial or commercial enterprises generally but a law of December 18, 1915, made profit sharing compulsory for workers' cooperative productive associations which receive support from the State. By a law of September 9, 1919, profit sharing was made compulsory in all mining operations which should receive concessions in the future, and a law of April 26, 1917, provided for the formation of incorporated copartnership societies, in which stock apportioned among the employees assures to the workers an interest in the profits realized. The law of October 29, 1921, relating to the new régime of the railways, has been considered by some to permit the creation of a system of profit sharing on railroads. The question was considered in the National Assembly during the discussion of the law but the text which was finally adopted provides only for a bonus granted for the purpose of promoting the interest of the personnel in the development of traffic and in economy in operating expenses.

Information was secured relative to 328 workers' cooperative productive associations, employing about 12,000 workers. The profits divided among the members of these associations varied from 25 to 75 per cent, the majority of associations paying from 25 to 30 per cent. The profits distributed in 1920 by 195 of the associations amounted to 3,896,458 francs,² 9,239 employees participating. The average amount received by workers who had been employed the entire year varied from 100 francs in the clothing industries to more than 1,000 francs in the glass and porcelain industries.

Of 11 associations established under the law of April 26, 1917, only 6 were functioning effectively as incorporated copartnership companies, and their establishment was considered to be too recent to make their experience of importance. No information was secured as to the profits distributed among the miners employed in the 51 mines for which concessions had been granted since the law went into effect.

Profit sharing due entirely to private initiative, was found to be in force in 75 out of 168 establishments which were reported to the Ministry of Labor as having profit-sharing systems. The 75 establishments employed about 102,000 workers; 62,000 of these worked for the Orleans Railway Company, which, however, has paid no profit-sharing dividends for several years owing to deficits in operations. Aside from this company, 10 of the firms employed more than 1,000 persons, 7 from 500 to 1,000, 32 from 100 to 500, and 25 less than 100. There were profit-sharing plans in operation

¹ France. Ministère du Travail. Office du Travail. Enquête sur la participation aux bénéfices. Paris, 1923. 129 pp.

² Franc, at par=19.3 cents. Exchange rate varies.

in 17 banks and insurance companies, 15 in the metal industries, 13 in mercantile establishments, 5 in the clothing industries, and 4 in the book industry, while the remaining 21 were scattered among various other industries.

More than one-third of the plans for which the date of establishment was reported had been started since 1919, 6 were established prior to 1850, 16 from 1851 to 1900, and 11 from 1901 to 1918. There were only six cases in which there was a formal agreement in regard to profit sharing between the employer and workers. In general the employers in their announcements state that the custom is purely voluntary on their part and they reserve the right to alter or abandon it at will. In 50 establishments the profits are divided according to an established system while in the remainder the proportion of profits to be paid is decided each year by the employer. Ten establishments employing 1,400 persons admit all their employees to share in the profits, 19 employing 70,500 exclude temporary workers ("*temporaires*"), 35 with 21,600 employees require a certain length of service varying from 3 months to 10 years, one year being required in the largest number of cases, and in 11 establishments with 8,500 employees the number to be admitted to participation in the profits is decided by the employer. In 55 enterprises individual shares are proportioned to the amount of earnings of the participants. In the remainder the shares depend upon various factors such as length of service, size of family, or regularity of attendance.

The form of payment of individual shares varies: 37 establishments, or nearly half, pay the dividend in cash; 14 others pay all or part in stock, or the shares are credited toward the savings fund or the retirement fund; while in 24 establishments the payments are deferred, usually for a certain number of years. In the great majority of enterprises the employees have no voice either in the calculation or division of the profits. In 17 plants only did the workers have the right to exercise any control over the plan for profit sharing.

The results of profit sharing for the year 1921 were reported for 62 establishments, employing 99,550 workers. Nine of them employing 63,050 workers, did not make any profits, so there was no distribution. Profits were divided in 53 establishments, employing 36,500 workers, of whom 28,413, or 78 per cent, participated. The total amount of the profit-sharing dividends for 1921 was 25,743,000 francs. The average dividend per employee was 906 francs. The range was from 24 francs in the establishment paying the lowest dividend to 4,169 francs in a porcelain factory which employed about 100 workers.

The general opinion of the employers in the undertakings in which there was a profit-sharing scheme was that it exerted a favorable influence on the stability of the working force. The opinion was not so unanimous, however, in regard to improvement in production or employee relations, although several employers considered that production had been increased and that labor troubles had been much reduced, or altogether averted as a result of the plan. It was not clearly established by the study whether profit sharing is increasing or on the decline. While more than one-third of the plans had been put into effect since 1919, a number, and among them some of the oldest, have recently been abandoned.

STRIKES AND LOCKOUTS

Industrial Disputes in Bombay (India) Presidency

THE Labor Gazette of Bombay for January, 1924, gives (p. 21) a résumé of the industrial disputes in the Presidency during 1923. From January 1 to December 31 there were 109 disputes, involving 109,917 workers, as compared with 143 disputes involving 181,723 workers during the previous year. The most important was a strike in the Ahmedabad cotton mills, which began April 1, 1923, involved over 43,000 workpeople, and continued for something over two months. The total number of working-days lost through disputes during the year was 2,841,000, an increase of about 275 per cent over the corresponding figure for 1922; the greater part of this increase was due to the strike in the cotton mills just mentioned.

Grouped according to industries, 77 per cent of the disputes were in the cotton-textile industry, 2 per cent in the transport industry, 6 per cent in the engineering industry, and 15 per cent in miscellaneous industries. Just over half, 51 per cent, were due to wage disagreements, 5 per cent to claims for bonus payments, 27 per cent to personal causes such as dismissals or reinstatements, and 16 per cent to unclassified causes. Of the strikes settled during the year, 71 per cent ended in favor of the employer and 17 per cent in favor of the employees; 12 per cent were compromised.

The February issue of the same Gazette contains an account of the earlier stages of an extensive strike leading up to a general lockout in the textile mills of Bombay. For some time past, the mill owners have paid at the end of the year a bonus, which was based on the profits of the year, but which for five years past has regularly amounted to a month's pay for workers who had put in nine months or more of regular service during the year, and proportionately less for those who had worked over three but under nine months. This had come to be looked upon as deferred pay. In July, 1923, the owners posted notices in all the mills that, owing to bad trade, no bonus would be paid for 1923. The workers claimed that as the bonus was regarded as deferred pay, and as the notices were not posted until July, they were entitled at least to a bonus for the first half of the year, but the owners denied this contention in toto. The matter did not become acute until the end of the year, when the workers began to hold meetings of protest. Their leaders strongly advised against a strike, pointing out that owing to the state of the cotton trade it was impossible for the workers to win, and that the only result would be the loss of normal wages as well as the bonus. On January 17, however, when the payment for the last half of December was made without any bonus, the workers of one mill went on strike, and others soon followed. On the 29th the owners posted, in the mills on strike, notices stating that unless the workers returned unconditionally by February 4

the mills would be closed entirely for two weeks. The immediate result of this was a rapid extension of the strike, and consequently of the lockout, into the other mills, and by the middle of February 75 cotton mills, 2 silk mills, 2 woolen mills, and 2 dye works were tied up, the textile industry of the city was at a complete standstill, and something over 163,000 workers were idle. By the 18th, the governor in his opening speech to the Legislative Council, declared it necessary to take public action.

The present dispute between the mill owners and their employees, like former ones, is difficult of settlement mainly owing to the lack of organization among the mill hands. As the present strike continues, and so many thousands of men are out of work, Government feel it is not possible to abstain longer from intervention, and propose to set up a special committee of inquiry to inquire into the merits of the dispute regarding bonus, and to report to Government for the information of the public.

By February 22 the committee was appointed and began its work. According to a dispatch published in the London Daily Herald of March 13, its findings were against the employees.

The committee has reported in favor of the mill owners. It finds, according to the exchange, that the bonus is dependent on profits, and that the profits do not justify payment. There is therefore no prospect of a settlement, and the mill workers are leaving the city in increasing numbers.

CONCILIATION AND ARBITRATION

Conciliation Work of the Department of Labor in March, 1924

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Division of Conciliation, exercised his good offices in connection with 49 labor disputes during March, 1924. These disputes affected a total of 70,563 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workmen directly and indirectly affected.

On April 1, 1924, there were 39 strikes before the department for settlement and, in addition, 13 controversies which had not reached the strike stage. Total number of cases pending, 52.

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Beginning	Ending	Directly	Indirectly
Ladies' garment workers, Chicago, Ill.	Strike.....	Garment workers.....	Asked wage increase, 10 per cent, 40-hour week, 5-day week.	Unable adjust. No agreement....	1924 Feb. 28	1924	3,000	-----
Stanton Manufacturing Co., Hyde Park, Boston, Mass.	do.....	Waterproof garments.....	Wages and recognition.....	Adjusted. Recognition; settle wages later.	Feb. 1	Feb. 27	27	-----
North American Lace Co., Philadelphia, Pa.	do.....	Lace makers.....	Wages; recognition; 3 dis-charged.	Pending.....	Mar. 1	-----	150	-----
Window cleaners, Cleveland, Ohio.	do.....	Window cleaners.....	Wages; recognition.....	do.....	Feb. 6	-----	110	-----
Bukow Co., Baltimore, Md.	do.....	Clothing workers.....	Asked increase; company proposed cut.	Adjusted. Received \$18 to \$30 a week.	Feb. 12	Feb. 27	10	-----
Hugo Huttig Hosiery Co., Paterson, N. J.	do.....	Textile workers.....	Wage cut 15 to 25 per cent.	Pending.....	Feb. 21	-----	125	-----
Savoy Silk Co., Paterson, N. J.	do.....	Silk weavers.....	15 per cent wage cut.....	Adjusted. Agreement concluded, may return.	Jan. 25	Mar. 13	90	-----
Ladies' garment workers, Waterbury, Conn.	do.....	Ladies' garment makers.....	Asked recognition; shorter hours.	Adjusted. Same wages, 44 hours a week and recognition.	Mar. 4	Mar. 20	125	85
Six companies, dressmakers, Boston, Mass.	do.....	Dressmakers.....	Asked 40-hour week, 10 per cent increase on piecework.	Adjusted. Forty hours a week and increase granted.	Feb. 19	Feb. 25	200	-----
Westmoreland Colliery, West Wyoming, Pa.	do.....	Miners.....	Demanded Dupont powder.	Adjusted. Returned to district board for settlement.	Mar. 1	Mar. 9	160	190
Joseph Hilton Co. (Inc.), Rahway, N. J.	do.....	Clothing workers.....	10 per cent cut on January and February work.	Adjusted. Cut accepted by workers.	Jan. 15	Feb. 26	80	200
Belmont Silk Co., Paterson, N. J.	do.....	Textile workers.....	Materials used in warp.....	Adjusted. Weavers paid by company for poor work.	Mar. 5	Mar. 6	50	25
Longshoremen, New York City	do.....	Longshoremen.....	Nonunion labor.....	Unclassified. Nonunion men dismissed.	Feb. 27	Feb. 27	7,500	-----
Lenape Silk Mill, East Stroudsburg, Pa.	do.....	Weavers.....	Asked increase of 2 cents a yard.	Pending.....	Feb. 13	-----	21	-----
Vogel & Boxer, New York City	do.....	Millinery workers.....	Asked closed shop and recognition.	Adjusted. Increase 7½ and 8 per cent and 44-hour week.	Mar. 3	Mar. 8	8	92
Woodward Colliery, Edwardsville, Pa.	do.....	Miners.....	Miner discharged.....	Adjusted. Referred to company for settlement; men return.	Mar. 12	Mar. 12	1	1,790
Washington Hotel, Washington, D. C.	Threatened strike.	Waiters.....	Renewal of agreement.....	Adjusted. Verbal acceptance of terms of former agreement.	Mar. 5	do.....	40	-----
Sprenger plant, Peoria, Ill.	Lockout....	Cigar makers.....	Company asked cut of \$4 per 1,000; men dis-charged.	Pending. Girls employed.....	Feb. 15	-----	15	-----
Building trades, Pittsburgh, Pa.	Strike.....	Building trades.....	Wages, hours, and conditions.	Pending. Additional trades struck.	Mar. 1	-----	1,025	-----

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION,
MARCH, 1924—Concluded

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Begin-ning	Ending	Di-rectly	Indi-rectly
Stephenson Co., Lynn, Mass.	Lockout	Cut soles makers	Asked recognition; in-crease; lack of orders.	Adjusted. Recognize shop com-mittee; adjust wages later.	Jan. 24	Mar. 25	59	-----
Painters and paper hangers, Dayton, Ohio.	Controver-sy	Painters, paper hang-ers.	Renewal of agreement	Adjusted. Returned; increase and 2-year agreement.	Feb. 5	Mar. 31	380	3,500
Eizer & Goldstein, Philadelphia, Pa.	Strike	Clothing (vest ma-ers).	Proposed cut; piecework	Adjusted. Wage restored; piece-work abolished.	Mar. 6	Mar. 7	14	-----
Asbestos workers, St. Louis, Mo.	do	Asbestos workers	Asked \$1.50 per hour	Adjusted. Terms not reported	(1)	Mar. 22	(1)	-----
Empire Car Co., Kankakee, Ill.	do	Employees	Wage cut of 10 to 30 per cent.	Adjusted. No increase; returned; no discrimination.	Feb. 15	Mar. 20	700	-----
Post Pearl Button Co., Philadelphia, Pa.	do	Button makers	Hours increased 48 to 56	Pending	Mar. 6	-----	22	-----
6 packing companies, Portland, Oreg.	Controversy	Butchers	Asked 20 per cent increase; renewal of agreement.	do	Nov. 7	-----	28	-----
Ewen Colliery, Pittston, Pa.	Strike	Miners	Abandoned vein; 3 men out	Adjusted. Agreed on price per yard.	Mar. 12	Mar. 18	129	-----
Philip Cappola, Brooklyn, N. Y.	do	Men's clothing	Asked wage increase	Adjusted. No increase; 44-hour week.	Feb. 11	Mar. 20	40	-----
26 plants, mineral water, New York City.	do	Bottlers	44-hour week and wages	Adjusted. Compromise wages, 45 to 46 hours.	Mar. 17	Mar. 19	300	40
Garment makers, New York City	Controversy	Ladies' garment mak-ers.	Asked 44-hour week, in-crease in minimum wage.	Pending	(1)	-----	30,000	-----
Sam Axelrod, New York City	Strike	Clothing makers	Asked 44-hour week and 10 per cent wage increase.	Adjusted. 44-hour week, 10 per cent increase, and agreement.	Mar. 7	Mar. 12	34	-----
Morning Sun, Long Beach, Calif.	do	Printers	Wages and conditions	Pending. Plant closed	Feb. 1	-----	46	-----
Chipman Hosiery Mills, Quakertown, Pa.	do	Textile workers	Asked \$4 a week increase on guaranty.	Pending	Mar. 17	-----	55	60
Hilliard & Merrill, Lynn, Mass.	do	Cut sole makers	Wages, discrimination, and discharges.	Adjusted. Recognize shop com-mittee; adjust wages, hours later.	Feb. 19	Mar. 25	80	-----
Marvin Manufacturing Co., New York City.	do	Children's clothing	Asked increase (reported violence, etc.)	Pending	Mar. 1	-----	75	-----
First National Bank Building, Greensburg, Pa.	do	Structural-iron work-ers.	Asked increase of \$2 a day	Unclassified. Job completed by other men.	do	Mar. 28	11	-----
Crompton Co., Crompton, R. I.	do	Dye workers	Discharged 6 men; wages	Unclassified. Returned before commissioner's arrival.	Mar. 24	-----	(1)	-----
General Cigar Co., Bethlehem, Pa.	do	Cigar makers	Proposed 13 per cent wage cut.	Pending	do	-----	600	-----
3 collieries, West Shenandoah, Pa.	do	Miners	Breaker work, etc.	Adjusted. Breaker boys placed elsewhere.	do	Mar. 26	4	2,995
Tuckers and pleaters, New York City.	do	Tuckers, etc.	40-hour week, recognition, conditions.	Adjusted. 42 hours, recognition, and minimum wage.	Mar. 20	Mar. 22	4,000	-----

Journeyman tailors, Philadelphia, Pa.	do	Tailors	25 per cent increase; work conditions.	Adjusted. 10 per cent to 25 per cent increase.	Mar. 26	Mar. 27	400	-----
Scranton Ry. Co., Scranton, Pa.	do	Railway workers	Asked 17 cents an hour in-crease.	Adjusted. Time and one-half for overtime; scale referred to arbitration.	Apr. 1	Apr. 5	635	-----

Journeyman tailors, Philadelphia, Pa.	-----do-----	Tailors	25 per cent increase; work conditions.	Adjusted. 10 per cent to 25 per cent, \$1 week increase.	Mar. 26	Mar. 27	400
Scranton Ry. Co., Scranton, Pa.	-----do-----	Railway workers	Asked 17 cents an hour increase.	Adjusted. Time and one-half for overtime; scale referred to arbitration.	Apr. 1	Apr. 5	635
100 contractors, Atlantic City, N. J.	Controversy	Electricians	Asked 12½ cents an hour increase.	Adjusted. 12½ cents an hour allowed; agreement for 1 year.	Mar. 15	Mar. 31	137
Penn Hardware Co., Reading Pa.	Strike	Lock makers	Piece-work system	Adjusted. Terms not reported.	(1)	Apr. 3	75
70 shops, cleaners and dyers, New York City.	Threatened strike	Cleaners, dyers	Asked \$5 increase; 44-hour week.	Unclassified. Settled before commissioner's arrival.	Mar. 27	Apr. 1	800
Weston Dodson Coal Co., Shenandoah, Pa.	Strike	Miners	Unpaid dues	Adjusted. Dues paid and men return to work.	Mar. 21	Mar. 21	3
Butchers, Scranton, Pa.	-----do-----	Butchers	Asked increase; work conditions.	Adjusted. Received \$5 a week increase.	Apr. 1	Apr. 5	165
Barbers, Scranton, Pa.	-----do-----	Barbers	(1)	Pending.	(1)	-----	200
Chicago, Rock Island & Pacific R. R.	-----do-----	Shopcrafts	General strike of 1922.	Terminated. Understanding reached through Department of Labor.	1922 Apr. 1	Mar. 28	8,000
Total	-----do-----	-----	-----	-----	-----	-----	59,729
							10,834

¹ Not reported.

IMMIGRATION

Statistics of Immigration for February, 1924

By W. W. HUSBAND, COMMISSIONER GENERAL OF IMMIGRATION

THE following tables show the total number of immigrant aliens admitted into the United States and emigrant aliens departed from the United States during February, 1924, and from July 1923, to February, 1924. The tabulations are presented according to the countries of last permanent or future permanent residence, races or peoples, occupations, and States of future permanent or last permanent residence. The last table (Table 6) shows the number of aliens admitted under the per cent limit act of May 19, 1921, from July 1, 1923, to March 31, 1924.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT, JULY, 1923, TO FEBRUARY, 1924

During—	Arrivals					Departures			
	Immigrant aliens admitted	Nonimmigrant aliens admitted	United States citizens arrived	Aliens debarred	Total arrivals	Emigrant aliens	Non-emigrant aliens	United States citizens	Total departures
July to December, 1923	499,863	85,336	173,156	16,985	775,340	44,299	75,910	133,600	253,809
January, 1924	33,878	10,476	15,638	2,145	62,137	5,723	8,689	20,817	35,229
February, 1924	29,901	10,842	22,161	1,851	64,755	3,706	7,880	24,197	35,783
Total	563,642	106,654	210,955	20,981	902,232	53,728	92,479	178,614	324,821

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED DURING FEBRUARY, 1924, AND FROM JULY, 1923, TO FEBRUARY, 1924, BY COUNTRIES

Country	Immigrant		Emigrant	
	February, 1924	July, 1923, to February, 1924	February, 1924	July, 1923, to February, 1924
Albania	5	226	25	178
Austria	475	7,296	10	136
Belgium	24	1,792	19	351
Bulgaria	12	493	13	168
Czechoslovakia	145	13,244	63	1,000
Denmark	516	4,120	16	357
Estonia	41	377		4
Finland	13	3,582	21	219
France, including Corsica	211	5,283	57	871
Germany	455	73,778	37	568
Great Britain and Ireland:				
England	182	23,640	137	3,037
Ireland	17	16,878	29	896
Scotland	23	33,235	28	573
Wales	4	1,507	3	44
Greece	47	4,268	337	4,878
Hungary	78	5,309	26	330
Italy (including Sicily and Sardinia)	3,175	46,318	1,520	17,039
Latvia	48	1,437	1	58
Lithuania	10	2,241	20	243
Netherlands	29	3,613	11	235
Norway	544	10,526	23	549
Poland	174	28,139	88	1,713
Portugal (including Azores and Cape Verde Islands)	29	2,562	52	2,620
Rumania	41	10,860	39	747
Russia	136	12,284	20	391
Spain (including Canary and Balearic Islands)	49	674	71	1,925
Sweden	808	17,489	20	512
Switzerland	28	3,606	12	219
Turkey in Europe	22	1,423	16	79
Yugoslavia	434	5,523	87	1,313
Other Europe	5	304		21
Total Europe	7,780	342,027	2,801	41,264

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, ETC.—Con.

Country	Immigrant		Emigrant	
	February, 1924	July, 1923, to February, 1924	February, 1924	July, 1923, to February, 1924
China.....	272	5,562	109	2,611
Japan.....	311	3,379	140	1,644
India.....	7	133	2	119
Syria, Palestine, and Mesopotamia.....	28	2,558	15	325
Turkey in Asia.....	34	2,726	5	153
Other Asia.....	14	238	2	48
Total Asia.....	666	14,596	273	4,900
Africa.....	11	803	8	85
Australia, Tasmania, and New Zealand.....	13	545	28	327
Pacific Islands (not specified).....	1	38	11	28
Canada and Newfoundland.....	14,092	133,306	234	1,723
Central America.....	59	1,209	28	375
Mexico.....	6,461	53,150	98	1,422
South America.....	407	6,706	51	751
West Indies.....	409	11,208	174	2,851
Other countries.....	2	54	.....	2
Grand total.....	29,901	563,642	3,706	53,728

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING FEBRUARY, 1924, AND FROM JULY, 1923, TO FEBRUARY, 1924, BY RACES OR PEOPLES

Race or people	Immigrant		Emigrant	
	February, 1924	July, 1923, to February, 1924	February, 1924	July, 1923, to February, 1924
African (black).....	309	7,734	52	890
Armenian.....	80	2,596	7	32
Bohemian and Moravian (Czech).....	96	6,555	37	899
Bulgarian, Serbian, and Montenegrin.....	97	2,259	48	1,266
Chinese.....	265	3,287	100	2,547
Croatian and Slovenian.....	325	3,901	13	76
Cuban.....	43	926	52	698
Dalmatian, Bosnian, and Herzegovinian.....	14	265	16	137
Dutch and Flemish.....	192	6,646	42	651
East Indian.....	4	96	.....	114
English.....	4,467	68,504	282	4,650
Finnish.....	65	3,480	27	288
French.....	4,102	33,144	70	908
German.....	1,353	91,302	74	933
Greek.....	79	4,564	340	4,910
Hebrew.....	1,208	45,839	18	148
Irish.....	1,429	34,608	57	1,030
Italian (north).....	409	10,191	204	1,206
Italian (south).....	2,981	38,260	1,326	15,959
Japanese.....	314	3,072	136	1,616
Korean.....	3	48	1	19
Lithuanian.....	16	1,863	21	282
Magyar.....	120	6,827	33	377
Mexican.....	6,371	51,826	95	1,380
Pacific Islander.....	.....	11	.....	.....
Polish.....	251	18,441	85	1,742
Portuguese.....	53	3,219	58	2,727
Rumanian.....	62	1,481	44	743
Russian.....	234	8,503	30	486
Ruthenian (Russniak).....	134	1,777	.....	7
Scandinavian (Norwegians, Danes, and Swedes).....	2,191	35,932	84	1,645
Scotch.....	2,037	50,725	63	856
Slovak.....	48	5,443	42	211
Spanish.....	143	2,614	106	2,409
Spanish American.....	141	1,850	50	583
Syrian.....	60	1,323	10	300
Turkish.....	15	313	15	212
Welsh.....	80	2,159	4	58
West Indian (except Cuban).....	50	1,333	16	457
Other peoples.....	60	725	48	297
Total.....	29,901	563,642	3,706	53,728
Male.....	17,976	339,078	3,076	40,512
Female.....	11,925	224,564	630	13,216

TABLE 4.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING FEBRUARY, 1924, AND FROM JULY, 1923, TO FEBRUARY, 1924, BY STATES OR TERRITORIES

State	Immigrant		Emigrant	
	February, 1924	July, 1923, to February, 1924	February, 1924	July, 1923, to February, 1924
Alabama.....	13	386	4	33
Alaska.....	27	218	6	49
Arizona.....	951	9,227	42	277
Arkansas.....	3	135		15
California.....	3,102	41,058	319	4,077
Colorado.....	48	1,236	16	139
Connecticut.....	462	11,043	67	1,006
Delaware.....	4	424	3	10
District of Columbia.....	48	1,287	6	205
Florida.....	168	2,814	62	1,013
Georgia.....	11	369	2	50
Hawaii.....	7	1,373		278
Idaho.....	54	810	9	81
Illinois.....	1,441	41,289	209	2,794
Indiana.....	102	4,768	12	438
Iowa.....	104	3,448	22	191
Kansas.....	62	1,325	3	62
Kentucky.....	20	503	3	31
Louisiana.....	81	979	8	261
Maine.....	961	7,948	3	78
Maryland.....	52	2,762	7	179
Massachusetts.....	2,891	47,525	207	4,721
Michigan.....	3,255	46,978	135	1,816
Minnesota.....	479	9,026	31	455
Mississippi.....	7	444		32
Missouri.....	100	3,973	14	276
Montana.....	130	1,489	3	138
Nebraska.....	86	2,264	5	105
Nevada.....	8	196	6	36
New Hampshire.....	567	4,904	10	61
New Jersey.....	643	28,241	158	2,094
New Mexico.....	105	872	2	33
New York.....	5,548	141,500	1,589	20,659
North Carolina.....	9	239	4	47
North Dakota.....	69	1,504	2	82
Ohio.....	503	21,746	114	2,404
Oklahoma.....	24	439	1	31
Oregon.....	340	4,686	30	256
Pennsylvania.....	1,023	43,700	338	4,677
Philippine Islands.....		1		
Porto Rico.....	29	185	4	110
Rhode Island.....	441	6,369	37	961
South Carolina.....	4	135	3	14
South Dakota.....	23	863	5	45
Tennessee.....	7	336	4	32
Texas.....	3,961	32,223	37	851
Utah.....	24	956	21	211
Vermont.....	223	2,206	8	44
Virginia.....	103	1,717	6	126
Virgin Islands.....		9		
Washington.....	1,254	14,607	67	1,060
West Virginia.....	72	1,834	25	467
Wisconsin.....	236	8,581	28	452
Wyoming.....	16	492	9	75
Total.....	29,901	563,642	3,706	53,728

TABLE 5.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING FEBRUARY, 1924, AND FROM JULY, 1923, TO FEBRUARY, 1924, BY OCCUPATIONS

Occupation	Immigrant		Emigrant	
	February, 1924	July, 1923, to February, 1924	February, 1924	July, 1923, to February, 1924
Professional:				
Actors.....	47	785	3	56
Architects.....	27	362	1	9
Clergy.....	129	1,546	22	257
Editors.....	5	41		6
Electricians.....	145	3,258	3	48
Engineers (professional).....	207	4,014	14	212
Lawyers.....	9	164	4	32
Literary and scientific persons.....	23	586	2	61
Musicians.....	66	1,217	7	51
Officials (Government).....	40	397	10	107
Physicians.....	110	931	2	56
Sculptors and artists.....	8	318	4	30
Teachers.....	204	2,627	6	190
Other professional.....	185	3,131	23	236
Total.....	1,205	19,377	101	1,354
Skilled:				
Bakers.....	115	3,171	10	129
Barbers and hairdressers.....	106	2,280	27	128
Blacksmiths.....	91	2,906	3	52
Bookbinders.....	8	251		1
Brewers.....		32		
Butchers.....	93	2,508	9	65
Cabinetmakers.....	19	413	6	34
Carpenters and joiners.....	674	13,494	33	422
Cigarette makers.....		41		2
Cigar makers.....	14	232	17	230
Cigar packers.....		20		1
Clerks and accountants.....	1,047	20,283	49	661
Dressmakers.....	105	3,307	12	94
Engineers (locomotive, marine, and stationary).....	105	3,026	3	56
Furriers and fur workers.....	22	275	2	8
Gardeners.....	36	1,033	7	74
Hat and cap makers.....	10	279		2
Iron and steel workers.....	106	6,889	5	71
Jewelers.....	16	375	1	20
Locksmiths.....	29	3,605		3
Machinists.....	285	5,607	14	167
Mariners.....	430	7,126	13	224
Masons.....	159	4,738	22	116
Mechanics (not specified).....	356	7,091	14	143
Metal workers (other than iron, steel, and tin).....	44	1,011	1	14
Millers.....	11	488	4	76
Milliners.....	22	579		2
Miners.....	175	6,328	43	543
Painters and glaziers.....	147	3,225	14	91
Pattern makers.....	12	306	1	2
Photographers.....	16	391	1	9
Plasterers.....	40	553	1	22
Plumbers.....	99	1,725	4	48
Printers.....	77	1,430	3	31
Saddlers and harness makers.....	6	295		
Seamstresses.....	70	2,056	6	29
Shoemakers.....	102	4,269	12	218
Stokers.....	66	812	1	14
Stonecutters.....	20	470	1	15
Tailors.....	165	6,130	19	223
Tanners and curriers.....	4	170		4
Textile workers (not specified).....	17	416		1
Tinners.....	32	649		5
Tobacco workers.....		25	1	1
Upholsterers.....	13	318		5
Watch and clock makers.....	12	489	1	7
Weavers and spinners.....	71	2,546	6	306
Wheelwrights.....	3	125		
Woodworkers (not specified).....	20	439		1
Other skilled.....	239	4,740	24	116
Total.....	5,309	128,967	390	4,495

TABLE 5.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING FEBRUARY, 1924, AND FROM JULY, 1923, TO FEBRUARY, 1924, BY OCCUPATIONS—Concluded

Occupation	Immigrant		Emigrant	
	February, 1924	July, 1923, to February, 1924	February, 1924	July, 1923, to February, 1924
Miscellaneous:				
Agents	137	1,643	4	87
Bankers	6	136	3	32
Draymen, hackmen, and teamsters	48	1,474	1	66
Farm laborers	903	23,949	11	32
Farmers	816	16,216	89	194
Fishermen	247	2,365	1	1,100
Hotel keepers	8	142		51
Laborers	5,218	79,678	2,053	20
Manufacturers	14	445	5	26,900
Merchants and dealers	459	9,312	143	50
Servants	1,253	46,078	85	1,730
Other miscellaneous	1,073	21,400	126	1,608
Total	10,182	202,838	2,521	2,749
No occupation (including women and children)	13,205	212,460	694	13,271
Grand total	29,901	563,642	3,706	53,728

TABLE 6.—STATUS OF THE IMMIGRATION OF ALIENS INTO THE UNITED STATES UNDER THE PER CENT LIMIT ACT OF MAY 19, 1921, AS EXTENDED BY PUBLIC RESOLUTION NO. 55, SIXTY-SEVENTH CONGRESS, APPROVED MAY 11, 1922, JULY 1, 1923, TO MAR. 31, 1924

Country or region of birth	Maximum monthly quota	Admitted Mar. 1-31, 1924	Annual quota	Admitted July 1 to Mar. 31	Balance for year ¹
Albania	58		288	288	(²)
Armenia (Russian)	46	16	230	165	38
Austria	1,468	104	7,342	7,336	3
Belgium	313		1,563	1,563	(²)
Bulgaria	61		302	302	(²)
Czechoslovakia	2,871		14,357	14,357	(²)
Danzig	60		301	301	(²)
Denmark	1,124	555	5,619	5,075	17
Estonia	270	76	1,348	648	698
Finland	784		3,921	3,921	(²)
Fiume	14		71	59	12
France	1,146	371	5,729	4,995	639
Germany	13,521		67,607	67,607	(²)
Great Britain and Ireland	15,468		77,342	77,342	(²)
Greece	613		3,063	3,063	(²)
Hungary	1,149	133	5,747	5,560	186
Iceland	15	2	75	24	51
Italy	8,411		42,057	42,057	(²)
Latvia	308		1,540	1,540	(²)
Lithuania	526		2,629	2,629	(²)
Luxemburg	19		92	92	(²)
Netherlands	721		3,607	3,607	(²)
Norway	2,440	913	12,202	11,873	274
Poland	6,195		30,977	30,977	(²)
Portugal	493		2,465	2,465	(²)
Rumania	1,484		7,419	7,419	(²)
Russia	4,881		24,405	24,405	(²)
Spain	182		912	912	(²)
Sweden	4,008	756	20,042	20,020	16
Switzerland	750		3,752	3,752	(²)
Yugoslavia	1,285	104	6,426	6,426	(²)
Other Europe	17		86	86	(²)
Palestine	12		57	57	(²)
Syria	177		882	882	(²)
Turkey	531	42	2,654	2,654	(²)
Other Asia	19		92	92	(²)
Africa	21		104	104	(²)
Egypt	4		18	18	(²)
Atlantic Islands	24		121	113	8
Australia	56		279	279	(²)
New Zealand and Pacific Islands	16		80	80	(²)
Total	71,561	3,072	357,803	355,145	1,982

¹ After all pending cases for which quotas have been granted and admissions charged to the quota during the current fiscal year have been deducted from the annual quota.

² Annual quota exhausted.

[1166]

Canadian Immigration and Emigration

WHILE immigration agents of the Canadian National Railways had reported the receipt of a large number of inquiries from farmers in the northwestern section of the United States, the heavy exodus of Canadians from the Dominion was still going on month by month, according to the American consul general at Montreal in his résumé of Canadian commercial and industrial conditions in January, 1924. In that month, for the section of Canada east of the Montana line, the United States immigration officers passed 12,275 Canadian citizens and 1,024 other aliens for permanent residence in the United States—a loss to the Dominion of 13,299 persons.

A colonization agent of the Canadian National Railways has stated, however, that on an average 150 French Canadian families were going back to the Dominion each week from New England. The immigration to Canada for the calendar year 1923 was as follows:

	Number of immigrants	Per cent of increase over 1922
British subjects.....	70, 110	126
From United States.....	20, 307	¹ 19
From other countries.....	46, 903	199
Total.....	137, 320	90

During 1923, 156,539 persons emigrated from the Dominion to remain permanently in the United States. This figure does not include the number crossing over to this country between the Montana line and the Pacific coast. It will be noted, therefore, that even without this latter number emigrants exceeded immigrants by 19,219.

In January, 1924, a new immigration arrangement was made by the British and Canadian Governments in accordance with which each immigrant from Great Britain will receive \$80 toward his transportation costs and for the expense of children under 17. The entire transportation expenses of immigrant household workers will be lent to them, with the exception of railroad fares in Great Britain. The greater number of these immigrants, however, pay their own way. A refund of £6² is made to a household worker who remains 12 months on a farm.

Nominations of immigrants may be made by Canadian residents, and in such cases the nominee's full passage is advanced, except British railway fares. Persons who nominate immigrants are required to guarantee the newcomers employment upon their arrival in the Dominion. Loans will be made to all members of an immigrant family who are 17 years of age or over. Minors under 17 receive assistance in the form of free grants.

As the outcome of a conference between representatives of the British steamship companies and of the Canadian department of colonization and immigration, all British immigrants who settle in the Dominion are to have "a 20 per cent preference rate on their crossing the ocean." It is hoped that these various inducements will result in stimulating immigration to Canada.

¹ Decrease.² Pound at par=\$4.8665. Exchange rate varies.

Emigration from Finland, 1923

A REPORT from the United States consul at Helsingfors, Finland, dated February 11, 1924, states that according to reports received by the Finnish Central Statistical Bureau 13,843 persons, of whom 9,136 were men and 4,707 were women, applied for passports in 1923 for the purpose of going to trans-Atlantic countries in search of work. Emigration in 1923 was considerably greater than for any other year since 1913. In 1914, 6,474 persons emigrated from Finland, the number steadily decreasing until 1919 when emigration was at its lowest, only 1,085 emigrating that year. Before the war the number of emigrants often exceeded 10,000 persons per year and twice exceeded 20,000.

In proportion to the total population of the country the emigration was 0.401 per thousand in 1923, 0.154 in 1922, 0.546 for the period 1901 to 1910, and 0.204 for 1911 to 1920.

Taking the place of destination as given in the passports for 1923, the majority of the emigrants went to the Americas. Passports issued to "America" numbered 8,853, while 4,843 gave Canada as the destination, 94 the United States, 15 Brazil, 3 Argentina, and 1 Cuba; 26 persons went to Australia, 6 to Africa, and 2 to Asia. The report states that only one-sixth of the women went to Canada as, contrary to the situation in the United States, there is no special demand for woman labor there.

The annual quota of Finnish emigrants to the United States is 3,921; and it is estimated that 4,000 are still waiting for permission to enter the United States.

Foundation of National Credit Institute to Assist Italian Labor Abroad¹

A N ITALIAN decree dated December 15, 1923, and published in the *Gazzetta Ufficiale* of February 11, 1924, provides for the founding of a national credit institute to assist Italian labor abroad (*Istituto Nazionale di Credito per il Lavoro Italiano all'Estero*).

The objects of the institute consist, among others, in financing, wholly or in part, work or colonization enterprises abroad which employ predominantly Italian labor, and to loan funds as guarantees or for supplies required in the execution of contracts for work or colonization undertaken abroad by Italian labor or cooperative associations. The institute may also make loans to individuals who intend to go abroad as settlers, or to start small industrial establishments in foreign countries.

The institute is to collect information and encourage studies and research regarding work or colonization to be undertaken abroad, prepare plans and provide subsidies for such undertakings, and gather data on foreign labor markets with reference to the employment of Italian labor. Work undertaken in Italian colonies is to be considered as falling within the scope of the institute's activities. In exceptional instances work undertaken in Italy is to be given the same consideration, if related to State service of direct assistance

¹ From report of American consulate at Rome, dated Feb. 19, 1924, and from Commerce Reports, Mar. 24, 1924, pp. 787, 788.

to emigrants. Another object of the institute consists in promoting and increasing thrift on the part of Italian emigrants and in soliciting the deposit of their savings.

All advances must be based on security, such security to consist of mortgages, the assignment of proceeds to be received under contracts, or tangible guaranties. Such advances, as far as possible, should be for brief periods.

Although the Government assumes no responsibility for maladministration of the institute, which will take the form of a private joint-stock corporation, it falls, without doubt, within the category of semigovernmental banks. The members of the board of directors must be Italian citizens. Four directors will be appointed by the Minister of Foreign Affairs in accord with the Ministers of National Economy, Finance, and Colonies and the Commissioner General of Emigration. The comptrollers will be chosen by the Minister of Foreign Affairs in accord with the Minister of Finance. The capital of the institute is not to exceed 100,000,000 lire.²

The various passport offices, the communes, and the post offices will cooperate in the sale of the shares and bonds of the institute. Interest payments on shares will be made at the post offices. Savings banks, State pawn banks, insurance companies, public credit institutions, and the postal savings banks (under certain limitations) are authorized by the decree to subscribe to shares and bonds. The Banco di Napoli and the Banco di Sicilia are ordered to invest in bonds of the institute one-tenth of the emigrants' savings received on deposit.

Interest at the rate of $4\frac{1}{2}$ per cent on the shares of the institute and of $3\frac{1}{2}$ per cent on its bonds is guaranteed. Payments under this guaranty are chargeable to the emigration fund.

Firms or corporations, national or foreign, having their main offices, branches, or representatives in Italy or its colonies, and engaged in navigation, banking, or any other activities having to do with the transportation of emigrants, the handling of their savings and remittances, etc., shall be required to invest gradually from 2 to 20 per cent of their reserve funds in bonds of the institute. In the case of foreign firms or corporations the same percentage of the capital employed in Italy for the above-named purposes shall be invested in such bonds.

The headquarters of the institute are to be at Rome. Offices may be opened in other parts of Italy and in the cities abroad where Italian emigrants are chiefly centered.

²Lira, at par=19.3 cents. Exchange rate varies.

FACTORY AND MINE INSPECTION

Arizona

THE following is a summary of the statistics published in the twelfth annual report of the State mine inspector of Arizona for the year ending November 30, 1923:

Mines inspected, Dec. 1, 1922-Dec. 1, 1923.....	116
Inspections made.....	227
Leases inspected, Dec. 1, 1922-Dec. 1, 1923.....	38
Inspections made.....	43
Men employed, surface, at last inspection.....	3, 197
Men employed, underground, at last inspection.....	10, 057
Fatal accidents.....	54
Serious and minor accidents.....	717
Number of inquests attended.....	48
Orders issued to mining companies.....	42
Orders issued to lessors.....	5
Cost of maintaining department.....	\$17, 345. 94

Massachusetts

THE inspection work reported by the Massachusetts Department of Labor and Industries for the month of February, 1924, included the following:

	Number
Inspections.....	2, 851
Reinspections.....	1, 191
Mechanical establishments covered.....	1, 000
Mercantile establishments covered.....	1, 500
Orders issued dealing with general labor conditions, industrial health, and industrial safety.....	1, 190
Orders issued in connection with new lighting code.....	145
Cases in which prosecution was instituted.....	33
Cases in which verdicts of guilty were secured.....	21

The wages paid by employers to workers after they had complained to the department aggregated \$1,464.73.

During the same month the department also investigated 19 cases of occupational disease, including cases of anthrax and poisoning from lead, cyanide, carbon monoxide, and the inhalation of chlorine fumes.

Minnesota

A TYPEWRITTEN report from the Industrial Commission of Minnesota includes the following statistics concerning its inspection service for March, 1924:

Division of women and children

Regular inspections.....	263
Special investigations, involving reinspections, follow-up orders, etc.....	231
Orders for compliance with law for employment of women.....	80
Conviction secured.....	1
Case of prosecution pending.....	1

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[1170]

Several large pay rolls were checked during March to find out what wage adjustments should be made for women and minor male workers.

Division of accident prevention

Inspections:	
Factories.....	116
Buildings.....	254
Railways.....	12
Special.....	300
Elevators.....	22
Stores and offices.....	1,483
Orders.....	700
Compliances.....	327

Two inspectors of the accident-prevention division during February and March, 1924, have been investigating bed mattresses and have discovered numerous violations of the Minnesota mattress law. The reputable manufacturers and dealers are vigorously cooperating with the commission to eliminate from the markets unsanitary mattresses purchased by some unscrupulous junkmen, recovered by dishonest manufacturers, and sold as clean and sanitary products.

One of the inspectors of the division spent the month making a survey of State institutions and expects shortly to report in detail on the investigation.

New York

AMONG the activities reported¹ by the bureau of inspection of the New York State Department of Labor for January, 1924, are the following:

Factories:		Mines, quarries, magazines, tunnels, and caissons:	
Regular inspections.....	6,918	Quarry inspections.....	7
Building surveys.....	4,649	Magazine inspections.....	120
Special inspections.....	1,522	Tunnel inspections.....	2
Complaints investigated..	50	Special inspections.....	10
Special investigations.....	318	Special investigations....	4
Compliance visits.....	8,059	Compliance visits.....	46
Department office calls...	283	Complaints investigated..	2
Information calls ²	5,202	Information and office calls	40
Mercantile establishments:		Boilers:	
Regular inspections.....	7,912	Regular inspections.....	341
Special inspections.....	302	Compliance visits.....	107
Complaints investigated..	72	Boiler certificates issued..	380
Compliance visits.....	2,597	Information and office calls	265
Tenements:		Industrial hygiene:	
Inspections of apartments..	31,153	Physical examinations....	³ 44
Inspections, licensed buildings.....	2,910	Special investigations....	441
Inspections, unlicensed buildings.....	388	Research investigations...	163
Complaints investigated..	13	Special details.....	129
Compliance visits.....	699	Information and office calls	242
Department office calls...	24	Building construction:	
Licenses—		Regular inspections.....	499
Issued.....	199	Special inspections.....	24
Canceled or revoked...	48	Compliance visits.....	544
Factory permits—			
Issued.....	23		
Canceled or revoked...	99		

¹ New York. Department of Labor. The Industrial Bulletin, February, 1924.

² Include visits to non-manufacturing establishments found in buildings apparently used for factory purposes.

³ Number of employees.

A summary of the orders and compliances reported by the bureau of inspection for January, 1924, is given below:

	Orders	Compliances
Factory.....	19, 738	* 20, 700
Mercantile.....	19, 708	17, 679
Licensed tenement.....	255	116
Tunnel and caisson.....		2
Boiler.....	171	242
Building construction.....	896	1, 020
Mine quarry and magazine.....	33	48

During the same period 166 prosecutions were begun against factories concerning the following matters: Sanitation, 39; accident prevention, 11; fire protection, 44; children, 36; women and minors, 29; day of rest, 7. The majority of the 74 prosecutions begun against mercantile establishments concerned minors.

Pennsylvania ⁵

THE report of the bureau of inspection of the Pennsylvania Department of Labor and Industry for January, 1924, includes the following:

Inspections.....	5, 783
Special inspections.....	1, 149
Visits.....	1, 365
Violations reported.....	847
Prosecutions authorized.....	7
Orders issued.....	573
Orders complied with.....	701

During the same period 5,341 boiler inspections were made and 546 elevator inspection reports were received and checked.

It has been suggested from time to time to the department that a law should be enacted to compel manufacturers, before selling machines, to guard them in accordance with the State's safety standards. Many machine manufacturers, however, are not residents of the Commonwealth and the department feels that the best way to secure guards for all machinery would be for all industrial executives in Pennsylvania to purchase only such machinery as is guarded according to the safety standards of the department. Additional expense for guards would thus be eliminated. Moreover, guards incorporated into the machinery would probably prove more effectual than safety devices added after the installation of the machine.

Creation of International Association of Factory Inspectors ⁶

AS LONG ago as 1919 the factory inspectors who attended the first session of the International Labor Conference as delegates and advisers of their Governments met to exchange views and compare experiences in regard to their work. Similar meetings were held at every subsequent session of the conference, and this year the association, which hitherto had existed only informally, was constituted on a more definite basis, the following constitution being adopted:

*Including 596 "waivals."

⁵ Pennsylvania. Department of Labor and Industry. Labor and Industry, March, 1924.

⁶International Labor Office. Industrial and Labor Information, Geneva, Nov. 9-Dec. 28, 1923, pp. 83, 84.

ARTICLE 1.—*Object of the association*

The object of the association shall be to promote the international exchange of information amongst factory inspectors.

ARTICLE 2.—*Membership*

Membership of the association shall be open to representatives of any national association of factory inspectors and to the chief inspector, deputy chief inspectors, chief technical inspectors and divisional inspectors in each country. The question as to who is to be regarded as equivalent to divisional inspector will be settled by the executive committee.

Questions relating to the admission of individual members who are not factory inspectors, or to the continued membership of persons who have left the factory inspection service, shall be decided by the executive committee in consultation with the corresponding members representing the country to which the person in question belongs.

ARTICLE 3.—*Organs of the association*

The organs of the association shall be:

- (1) The general assembly of the members;
- (2) The executive committee;
- (3) The committee of corresponding members.

The general assembly shall meet at least once a year on the occasion of the general conference of the International Labor Organization. The agenda shall be fixed in advance by the executive committee in consultation with the corresponding members. Its decisions shall be taken by a simple majority of the members present.

The members belonging to each country shall nominate a representative to serve on the committee of corresponding members. The representatives shall undertake to reply to questions relating to factory inspection matters and labor legislation in their country which are sent them by the secretariat of the association, in so far as their official duties permit.

The executive committee shall consist of eight members and shall include a chairman; a vice chairman; a secretary; a deputy secretary, who shall also keep the accounts of the association.

The executive committee shall be elected annually by the general assembly by simple majority. Its members shall be eligible for reelection.

ARTICLE 4.—*Subscriptions*

The subscription will be five Swiss francs for each member. National associations of factory inspectors shall have to pay for as many members as they delegate to the membership of the international association.

It will be seen that the constitution provides for a committee of corresponding members, who, by the intermediary of the secretariat, will reply to requests for information from factory inspectors members of the association. It is hoped that the new association will be able to contribute to the development of the international protection of workers.

WHAT STATE LABOR BUREAUS ARE DOING

Arizona

THE report of the Arizona State mine inspector for the year ending November 30, 1923, is summarized on page 238 of this issue of the MONTHLY LABOR REVIEW.

Illinois

AN ACCOUNT of the activities of the Illinois public employment offices and figures showing volume of employment during February, 1924, are given on page 151 of this issue of the MONTHLY LABOR REVIEW.

Iowa

FIGURES showing the volume of employment in Iowa industries in February, 1924, are given on page 153 of the present number of the MONTHLY LABOR REVIEW.

Maryland

EMPLOYMENT conditions in March, 1924, as shown by the report of the commissioner of labor and statistics of the State are given on page 154 of the MONTHLY LABOR REVIEW.

Massachusetts

FIGURES showing the work of Massachusetts for February, 1924, in the field of wages and hours of labor and factory inspection are given on pages 103 and 238 of this issue of the MONTHLY LABOR REVIEW. Data as to volume of employment and average earnings of workers in January and February, 1924, are contained in the table on page 155.

Minnesota

ACCOUNTS of the placement and factory-inspection work done in this State in March, 1924, are contained on pages 156 and 238, respectively, of the present number of the MONTHLY LABOR REVIEW.

New York

AN ARTICLE showing the results of an investigation of working time in the factories of New York State is contained in this issue of the MONTHLY LABOR REVIEW, page 104. Data on employment for February, 1924 and on the inspection work done in the State for January, 1924, are given on pages 156 and 239, respectively.

Ohio

S **STATISTICS** of placement work of the Ohio public employment offices for March, 1924, are contained in the present issue of the **MONTHLY LABOR REVIEW**, page 158.

Pennsylvania

T **HE** reports of the Pennsylvania offices on their work in the field of employment and factory inspection are summarized on pages 159 and 240 of this number of the **MONTHLY LABOR REVIEW**.

Wisconsin

O **N** **PAGE** 159 of this issue of the **MONTHLY LABOR REVIEW** are given figures showing the changes in number of persons employed and in amount of pay roll in February, 1924.

CURRENT NOTES OF INTEREST TO LABOR

Resignation of Hon. Will J. French from California Industrial Accident Commission

THE resignation of Hon. Will J. French as a member of the Industrial Accident Commission of California, which became effective March 31, 1924, terminated a continuous and notable service of more than 12½ years on that body. He has left the commission to take executive charge of the newly organized California Society for the Blind, which he feels offers opportunity for constructive work, especially in connection with the rehabilitation and placement of those without sight.

Creation of Labor Office in Colombia

A GENERAL labor office has been established in Colombia by a law passed November 12, 1923, according to a report from the Colombian legation. The new labor office will be under the department of industry and will deal with such subjects as the following: Wage disputes between capital and labor; individual and collective insurance; workmen's houses; observance of sanitation in industrial and commercial establishments; industrial accidents; employment of women and minors; civic education of the laboring classes; the minimum wage; technical training; campaigns against vagrancy, alcoholism, tuberculosis, social diseases, and other menaces to the laboring classes.

Use of Post Office as Employment Agency in New Zealand

NEW-ZEALAND, according to the Canadian Congress Journal (Montreal) for March, 1924, is trying the experiment of using postmasters as employment agents in all towns where no permanent official of the Labor Department is stationed. In the past, civil-service officials and constables have been empowered to act in this capacity, but the results were not satisfactory. Under the new plan anyone desiring to secure a worker may apply at the nearest post office, and if the employee can not be supplied from the neighborhood, the postmaster will communicate with the nearest office of the Labor Department. In the same way, workers out of employment may put themselves in touch with the Labor Department service by applying at the nearest post office.

PUBLICATIONS RELATING TO LABOR

Official—United States

ARIZONA.—Mine Inspector. *Twelfth annual report, for the year ending November 30, 1923.* [Phoenix, 1924?] 71 pp.

Statistics from this report are published on page 238 of this issue of the MONTHLY LABOR REVIEW.

CALIFORNIA.—Department of Labor and Industrial Relations. Bureau of Labor Statistics. *Labor laws of the State of California [including laws enacted in 1923].* Sacramento, 1924. 184 pp.

ILLINOIS.—Industrial Commission. [Annual report], July 1, 1921, to June 30, 1922; statistical report for calendar year, 1921. Springfield, 1923. 31 pp.

The above report is reviewed on pages 201 and 202 of this issue of the MONTHLY LABOR REVIEW.

MASSACHUSETTS.—Department of Labor and Industries. *Annual report on the public employment offices for the year ending December 31, 1922.* [Boston, 1923?] 29 pp.

NEW YORK.—Department of Labor. Bureau of Women in Industry. *Hours and earnings of women in five industries—confectionery, paper-box, shirts and collars, tobacco, and mercantile.* Albany, 1923. 116 pp. Special bulletin No. 121.

A brief summary of this report is given on pages 117 and 118 of this issue of the MONTHLY LABOR REVIEW.

OHIO.—Department of Industrial Relations and the Industrial Commission. *The workmen's compensation law of Ohio, with amendments and annotations; all laws defining the duties and powers of the Department of Industrial Relations and the Industrial Commission of Ohio, with amendments and annotations; rules and regulations governing the application of the workmen's compensation law.* Columbus, 1924. 212 pp. Bulletin.

PENNSYLVANIA.—Department of Internal Affairs. Bureau of Statistics and Information. *Fourth industrial directory of the Commonwealth of Pennsylvania [covering the calendar year 1921].* Harrisburg, 1922. 1409 pp.

— — — — *Report on productive industries, railways, taxes and assessments, waterways, and miscellaneous statistics of the Commonwealth of Pennsylvania for the year 1921.* Harrisburg, 1923. xiv, 988 pp.

WISCONSIN.—Industrial Commission. *Eleventh annual report of the [Milwaukee] Citizens' Committee on Unemployment and the Public Employment Office of Milwaukee, July 1, 1922, to June 30, 1923.* [Madison, 1923?] 11 pp.

UNITED STATES.—Department of Commerce. Bureau of the Census. *Fourteenth Census of the United States, taken in the year 1920. Vol. IV: Population, 1920—Occupations.* Washington, 1923. 1309 pp.

— Department of the Interior. *Report of the Governor of Hawaii [for fiscal year ending June 30, 1923].* Washington, 1923. iv, 124 pp. Map.

Data from this report are published on pages 24 to 26 of this issue of the MONTHLY LABOR REVIEW.

— Bureau of Mines. *Quarry accidents in the United States during the calendar year 1922, by William W. Adams.* Washington, 1924. v, 61 pp. Technical paper 353.

This bulletin is reviewed on pages 182 and 183 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES. Department of Labor. Bureau of Labor Statistics. *Proceedings of the tenth annual convention of the Association of Governmental Labor Officials of the United States and Canada, held at Richmond, Va., May 1-4, 1923. Washington, 1923. x, 212 pp. Bulletin No. 352. Miscellaneous series.*

An account of this meeting was published in the MONTHLY LABOR REVIEW for June, 1923 (pp. 246-248).

— Children's Bureau. *Laws relating to mothers' pensions in the United States, passed during the years 1920 to 1923, inclusive. Washington, 1924. viii, 99 pp.*

In 1919 the Children's Bureau published a compilation of laws on mothers' pensions, covering the United States, Canada, Denmark, and New Zealand. Attention is called to the fact that 42 States, together with Alaska and Hawaii, now have laws granting aid to mothers with dependent children, and that the scope of this legislation is steadily broadening.

"The emphasis is increasingly being placed on adequate aid and on other forms of assistance that will safeguard the child's health, education, and opportunities for normal living."

— Work of children on truck and small-fruit farms in southern New Jersey. Washington, 1924. v, 58 pp. Bureau publication No. 132.

Some of the findings of this report are given on page 115 of this issue of the MONTHLY LABOR REVIEW.

— Women's Bureau. *Changes since 1921 in State laws affecting women's hours and wages. [Washington, 1924?] 10 pp. Supplement to bulletin 16.*

— Fuel Distributor. *Final report, to the President of the United States, September 21, 1923. Washington, 1923. v, 51 pp. Charts.*

This report of the Federal Fuel Distributor, appointed under the act of September 22, 1922, deals with the production, transportation, and distribution of anthracite and bituminous coal and coke during 1922 and 1923, giving figures for earlier years for comparison. The duties of the Federal Fuel Distributor were mainly to make an equitable distribution of the available supply of fuel during the national emergency created by the coal strike of 1922 and to prevent purchase or sale at prices unjustly or unreasonably high. The statistical tables and charts show production of coal and coke, railroad and water shipments, exports, and prices.

— Government Printing Office. Superintendent of Documents. *Immigration, naturalization, citizenship, Chinese, Japanese, Negroes, and aliens. List of publications relating to above subjects for sale by Superintendent of Documents, Washington, D. C. Washington, November, 1923. 10 pp. Price list 67—7th edition.*

— Labor, child labor, cost of living, reconstruction, employers' liability, insurance, wages, women wage earners, strikes. *List of publications relating to above subjects for sale by Superintendent of Documents, Washington, D. C. Washington, December, 1923. 27 pp. Price list 33—9th edition.*

Official—Foreign Countries

CANADA.—Bureau of Statistics. *Mining, metallurgical, and chemical branch. Coal statistics for Canada for the calendar year 1922. Ottawa, 1923. 96 pp.*

The Canadian coal-mining industry employed an average of 30,096 workers during 1922, of whom 7,714 were surface workers and 22,382 were employed underground. The surface men averaged 259 working-days during the year and the underground workers 219 days. The total production of coal during the year amounted to 15,157,431 tons of 2,000 pounds each. This meant an average production per employee (surface and underground workers combined) of 503.6

tons per year and of 2.2 tons per day. Figured on the basis of underground workers-only, this was a production per employee of 677.2 tons per year and 3.1 tons per day. Earnings per man-day averaged \$5.18, as compared with \$6.20 the previous year.

Fifteen disputes occurred in the industry during the course of the year, affecting 25,251 men and causing a loss of 1,222,288 days' working time.

CANADA.—Department of Immigration and Colonization. *Report for the fiscal year ended March 31, 1923.* Ottawa, 1923. 69 pp.

Immigration statistics more recent than those contained in this report are published in the present issue of the MONTHLY LABOR REVIEW, page 235.

— Department of Labor. *Labor legislation in Canada, 1923.* Ottawa, 1927. xiv, 84 pp.

A summary of this compilation is published on pages 211 to 213 of this issue of the MONTHLY LABOR REVIEW.

— (NOVA SCOTIA).—Department of Industries and Immigration. *Report [for the year ending September 30, 1923].* Halifax, 1924. 56 pp.

FRANCE.—Ministère du Travail. Office du Travail. *Enquête sur la participation aux bénéfices.* Paris, 1923. vii, 129 pp.

A summary of this report on profit sharing in France is found on pages 222 and 223 of this issue of the MONTHLY LABOR REVIEW.

GREAT BRITAIN.—Industrial Fatigue Research Board. *On the extent and effects of variety in repetitive work.* London, 1924. iv, 38 pp. Report No. 26.

This study is divided into two parts, the first dealing with the degree of variety in repetitive industrial work and the second with the effect of changes in activity. Typical examples of repetitive processes were studied in the manufacture of boots and shoes, tin canisters, chains, and handkerchiefs, and in letterpress printing and bookbinding, and in wrapping, labeling, and packing. Altogether, 50 processes were studied as to the time spent on the chief manual or machine operation, on subsidiary operations, and on walking about to carry material. Workers who sat at their work were found to have on an average four breaks per hour, during half of which time they were either standing or walking, while those who worked standing had five breaks, during most of which they were walking about, carrying material. The breaks averaged about seven minutes per hour. The effect of changes of occupation were studied in the workrooms, and a special laboratory test was made under simplified and controlled conditions. From the results it appeared that too many changes in the form of activity are undesirable and affect production adversely. On the other hand, the laboratory experiments showed that changes in the form of activity at 50-minute intervals resulted in an increase in output and a decrease in errors, while the subjects found the varied days much more congenial than the days of uniform activity.

— Inter-Departmental Committee on Public Assistance Administration. *Report of the committee on the coordination of administrative and executive arrangements for the grant of assistance from public funds on account of sickness, destitution, and unemployment.* London, 1924. 167 pp. Cmd. 2011.

Contains a useful summary of the historical development of poor-law relief in Great Britain, and of such specialized forms of assistance as health and unemployment insurance, old-age pensions, maternity and child-welfare service, provision for necessitous school children, plans for treatment and training, employment, and resettlement of ex-service men, and the like. Gives recommendations for linking these services more closely together, so as to prevent either failure or overlapping of assistance in cases of need.

GREAT BRITAIN.—Ministry of Labor. *Memorandum on the proposal to use unemployment benefit in aid of (a) wages on relief work, or (b) wages in industry.* London, 1923. 8 pp.

The proposals to use the unemployment benefit as a subsidy in aid of wages were so numerous and so strongly pressed that the Ministry of Labor took the plan under advisement, and after consideration issued this memorandum, in which the proposed change is decisively rejected. A fundamental objection is found in the fact that the unemployment benefits are paid from a fund to which the employers and the workers contribute about three-fourths, the contributions being paid in for the express purpose of providing benefits for the unemployed and paying the expenses of administration. The funds could not be diverted from this exclusive purpose without legislation authorizing the change, and such legislation would strike a serious blow at the contributory principle underlying the present plan. A number of less fundamental but serious objections to the suggested change are also brought forward, including the harmful effects which subsidies in aid of wages have produced in the past.

— *Report on the administration of the trade boards acts from January 1, 1922, to March 31, 1923.* London, 1923. 21 pp.

Data from this report are given on page 28 of this issue of the MONTHLY LABOR REVIEW.

INTERNATIONAL LABOR OFFICE.—*Factory inspection—historical development and present organization in certain countries.* Geneva, 1923. 316 pp.

A compilation of a series of surveys of factory inspection in various countries which were made for the purpose of securing facts to serve as a basis for discussion and resolution at the fifth session of the International Labor Conference, held at Geneva, October 22 to 29, 1923.

— *International conference of labor statisticians.* Geneva, 1924. 80 pp. *Studies and reports, series N (statistics), No. 4.*

Report on the international conference of representatives of labor statistical departments, held at Geneva, October 29 to November 2, 1923. A résumé of the conference is published on pages 215 to 218 of this issue of the MONTHLY LABOR REVIEW.

— *The protection of eyesight in industry; problems of industrial lighting.* Geneva, 1923. 158 pp. *Studies and reports, series F (industrial hygiene), No. 6.*

This study gives a general review of the existing knowledge regarding industrial lighting, and points out certain aspects which have not yet been sufficiently investigated. It covers a discussion of the sources of light, natural and artificial; the conditions as to light which different kinds of work demand; eye conditions; eyestrain; industrial accidents due to faulty lighting; prevention of eyestrain; and regulation of industrial lighting.

ITALY.—Ministero per l'Economia Nazionale. Direzione Generale del Lavoro e della Previdenza Sociale. *L'assicurazione obbligatoria contro l'invalidità e la vecchiaia. Prima relazione sull'applicazione del decreto-legge 21 aprile 1919, n. 603 (al 31 dicembre 1922).* Rome, 1924. vii, 224 pp. *Pubblicazioni N. 7.*

This is the first report on the practical application of the Italian law of April 21, 1919, on compulsory invalidity and old-age insurance. The report discusses the law itself and the regulations for its administration, the technical-financial bases of the law, the organization of the insurance, the contributions and their collection, voluntary insurance, and the financial results of the insurance system.

NETHERLANDS.—[Ministerie van Binnenlandsche Zaken en Landbouw.] Centraal Bureau voor de Statistiek. *Jaarcijfers voor het Koninkrijk der Nederlanden, rijk in Europa, 1922.* The Hague, 1924. liii, 335 pp.

Statistical yearbook of the Kingdom of the Netherlands (European territory only) covering the year 1922. The contents of this issue are essentially the same

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as those of preceding issues. Of special interest to labor are the statistics relating to emigration, the occupational census, factory inspection, chambers of labor, employment offices, strikes and lockouts, wages, trade-unions, housing, cost of living, prices, welfare work, cooperative societies, social insurance, and production.

NEW ZEALAND.—Census and Statistics Office. *Official yearbook, 1924. Wellington, 1923. xii, 782 pp.*

Among the many subjects included are land settlement, pensions of various kinds, prices, wages, and industrial disputes.

SWEDEN.—[Handelsdepartementet.] Kommerskollegium. *Industri. Berättelse för år 1922. Stockholm, 1924. 129 pp. Sveriges officiella statistik. Industri och bergshantering.*

Census of Swedish manufactures for 1922. Contains information on number of establishments, administrative personnel, number of workers, etc.

—(STOCKHOLM).—Arbetsförmedling och Statistiska Kontor. *Berättelse angående Stockholms stads arbetsförmedling jämte statistisk översikt rörande verksamheten år 1922. Stockholm, 1923. 17*, 11 pp. Stockholms stads statistik IX: Arbetsförmedling.*

Report on operations of the Stockholm employment agency. In 1922 there were 143,360 applications for work, 55,325 vacancies, and 45,728 places filled as against 134,488, 49,973, and 39,226, respectively, in 1921.

—Statistiska kontor. *Statistisk årsbok för Stockholms Stad, 1923. Stockholm, 1923. xvi, 222 pp. Stockholms stads statistik I: Årsbok.*

Statistical yearbook for the city of Stockholm for 1923. Contains statistics on building operations, cooperative societies, retail prices, cost-of-living index, wages, etc.

Unofficial

ABBOTT, EDITH. *Immigration: Select documents and case records. Chicago, University of Chicago Press, 1924. xxii, 809 pp.*

The historical, legal, and social aspects of immigration are covered in this collection of published documents and unpublished case records designed to be used as a source book by students of immigration. The records, which relate only to European immigration, have been selected from the files of the Immigrants' Protective League of Chicago and the Immigrants' Commission of Illinois. "It is believed that the case records dealing with the admission, exclusion, and deportation of immigrants will be of special interest to those studying the administration of our Federal immigration laws, and some of the records in the last section will be interesting to students of local administrative problems." The material is classified under the following headings: The journey of the immigrant; the admission, exclusion, and expulsion of aliens; and domestic immigration problems.

AMERICAN ENGINEERING STANDARDS COMMITTEE. *Standardization—what it is doing for industry. New York, 29 W. 39th Street, [1924.] 23 pp.*

The need for standardization in manufacturing and the accomplishments of the different public and private agencies and of the American Engineering Standards Committee are outlined in this pamphlet, and the necessity for checking the industrial waste involved in the excessive multiplicity of sizes and styles of merchandise if our standard of living is to be advanced or even maintained is pointed out. As evidence of this waste, examples are cited of a firm making 7,500 different varieties of bed casters, three ax manufacturers making 6,118 varieties of common axes, and one manufacturer making 20,000 regular varieties of electric motors. While the Government, through the Federal Specifications Board and several of the bureaus and departments, and various business organizations have accomplished much in the way of standardization, the American

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Engineering Standards Committee in addition to formulating standards has coordinated this work and has served as the authoritative channel of cooperation with similar bodies in foreign countries. The financial needs of the committee, if it is to accomplish its present work and develop in the future, are explained and a list of the organizations at present represented on the committee is appended.

ANDREWS, JOHN B. *Needless coal mine accidents: A program for their prevention.* New York, 131 East 23rd St., 1924. 15 pp. Reprinted from *American Labor Legislation Review* for March, 1924.

The writer outlines the program of the American Association for Labor Legislation for prevention of coal-mining accidents. These recommendations include adoption of uniform legal minimum safety standards, restrictions as to kinds of explosives used and use of shale or rock dust to check the spread of coal-dust explosions, universal adoption of schedule rating for compensation insurance, an adequate and thoroughly trained mine inspection staff, and greater public authority to establish a national minimum of safety.

APPLETON, W. A. *Unemployment: A study of causes, palliatives and remedies.* London, Hodder and Stoughton (Ltd.). [1923?] 157 pp.

Reviews briefly the many causes contributing to bring about a period of unemployment and emphasizes the fact that no one remedy can prevent or relieve such a crisis. Discusses the various measures which, combined, may prevent cyclical unemployment and modify and relieve seasonal and endemic unemployment. Lays down general principles, but deals with few specific measures, except to point out the advantages of unemployment insurance by separate industries over the general scheme now in force, and to emphasize the importance of increasing productive capacity and keeping down costs as a means of meeting the present situation.

BLANKENHORN, HEBER. *The strike for union: A study of the nonunion question in coal and the problems of a democratic movement.* New York, H. W. Wilson Co., 1924. xi, 263 pp.

This is an account of the Somerset coal strike in 1922-23, with the question of union organization as the central theme. It is largely made up of stories of the strike as told by the miners themselves and embodies the trade-unionist point of view.

CALIFORNIA, UNIVERSITY OF. Division of Vocational Education. *The administration of the part-time school in the small community. Part I, by Ralph Edward Berry.* Berkeley, Calif., 1924. 46 pp. *Part-time education series, No. 13. Division bulletin No. 14.*

Gives the terms of the California law requiring attendance at part-time schools, pointing out the special classes it was intended to reach, and discussing the various conditions under which the law may be applied. Discusses in detail the manner of organizing a part-time school or department and securing the cooperation of the community, outlines the kinds of courses which may advantageously be offered, and deals with the financial questions involved.

COLUMBIA UNIVERSITY. *Labor disputes and the President of the United States, by Edward Berman.* New York, Longmans, Green & Co., 1924. 284 pp. *Studies in history, economics and public law, Vol. CXI, No. 2.*

Strikes which have reached the status of a national problem, either through the numbers involved, by reason of threatened hardship or inconvenience to large numbers of people, or because of violence and disorder, have been a feature of only about the past 30 years of trade-unionism in this country. In this volume all the strikes which have caused the President of the United States to intervene either to suppress disorders or to effect a settlement are studied, beginning with the Pullman strike of 1894 and including the railway shopmen's strike of 1922.

The causes of each strike, the action taken by the President of the United States, and the results are given in detail, and in each case the author presents his conclusions as to the necessity for Federal interference and the effects of such action.

CONSUMERS' LEAGUE OF EASTERN PENNSYLVANIA. *Working women and children in Pennsylvania: An analysis of the occupational and the manufacturing sections of the 14th United States Census*, by Grace Pugh. Philadelphia, 1923. 34 pp.

Some statistics from this report are given on page 118 of this issue of the MONTHLY LABOR REVIEW.

DOUGLAS, PAUL H. *Family allowances and clearing funds in France*. Reprinted from the *Quarterly Journal of Economics*, February, 1924, pp. 250-293.

Certain sections of this article are summarized on pages 105 to 108 of this issue of the MONTHLY LABOR REVIEW.

DROPPERS, GARRETT. *Outlines of economic history in the nineteenth century*. New York, Ronald Press Co., 1923. vi, 286 pp.

This work, which is designed for a college textbook, covers the economic development of the United States, Great Britain, France, Germany, and Italy in the nineteenth century, with the object of furnishing the historical background for the present economic period.

FULLER, RAYMOND G. *Child labor and the Constitution*. New York, Thomas Y. Crowell Co., 1923. xvi, 323 pp.

A discussion of child labor much wider in scope than the title seems to indicate. The book contains seven chapters, which deal, respectively, with the children of America, rural child labor, urban and industrial child labor, child labor and the schools, laws and legislative standards, the problem of Federal action, and international legislation. Each chapter is followed by a brief bibliography of works dealing with its subject, and in addition there is a comprehensive bibliography of recent books, pamphlets, reports, and magazine articles treating of child-labor problems.

INSTITUTE FOR GOVERNMENT RESEARCH. *The Bureau of Immigration, its history, activities, and organization*, by Darrell Hevenor Smith and H. Guy Herring. Baltimore, Johns Hopkins Press, 1924. xii, 247 pp. Service monographs of the United States Government, No. 30.

This monograph describes the work of the Bureau of Immigration of the Department of Labor and gives an account of its history and organization. The function of the Bureau of Immigration and the immigration service at large is the administration of the laws relating to the admission, exclusion, and deportation of aliens. In order to promote an understanding of the work of the bureau the report includes a discussion of the problems connected with the immigration question. The appendixes contain an outline of organization, giving the number and compensation of the personnel in the Washington office and the different offices throughout the country; a classification of activities; a discussion of the publications of the bureau; a compilation of immigration laws; a statement of appropriations and expenditures; and a bibliography.

— *The Bureau of Public Personnel Administration, organization and work*. Washington, 26 Jackson Place, 1923. 11 pp.

This report gives an account of the organization and activities of the bureau which was established as a clearing house for information regarding personnel administration in the public service, national, State, county, and local; and to develop and improve methods of personnel administration.

INTERNATIONAL ASSOCIATION ON UNEMPLOYMENT. *General meeting, Luxemburg, September 9-11, 1923*. Geneva, 1923. 601 pp.

This volume consists of seven sections, the first of which gives the minutes of the opening session. Each of the other six sections deals with one of the following subjects discussed at the meeting: Unemployment and migration; unem-

ployment relief and possibilities of employment; vocational guidance; unemployment among professional workers; general program; and reorganization of the association. Each of the six sections contains the papers read by the representatives of the various countries in the original language in which they were written, the general report on the subject under discussion and the resolutions of the meeting being given in three languages (French, German, and English). A paper on "The work of the American section," by J. B. Andrews, is reproduced in an appendix.

KEYNES, JOHN MAYNARD. *Monetary reform*. New York, Harcourt, Brace and Co., 1924. viii, 227 pp.

The following chapter headings indicate the nature of the discussions: The consequences to society of changes in the value of money; Public finance and changes in the value of money; The theory of money and of the foreign exchanges; Alternate aims in monetary policy. The final chapter contains the author's suggestions for regulating the supply of currency and credit in order to maintain, as far as possible, the stability of the internal price level, and a method for regulating the supply of foreign exchange so as "to avoid purely temporary fluctuations, caused by seasonal or other influences and not due to a lasting disturbance in the relation between the internal and the external price level."

MOORE, HARRY H. *Public health in the United States: An outline with statistical data*. New York, Harper & Bros., 1923. xix, 557 pp. Illustrated.

This is a very comprehensive study of public health conditions and of agencies and factors which have to do with public health in the United States. It includes discussion of the causes of death; disabling sicknesses, defects, and minor ailments; and the economic costs of disease. The development of preventive medicine is outlined and the various infectious or other diseases of a serious nature are discussed. A section of the book relating to the exploitation of ignorance regarding disease shows the extent to which nostrums are used, their wide advertising, and the extent of the development of various systems of treatment which have no scientific basis. Another section contains an account of health organizations; organized recreation; the dispensary, clinic, and health center; health service in industry; and other significant health activities. The closing section is devoted to a consideration of the sociological and economic aspects of public health; the problems of securing and training public health workers; and public economy and public health. The appendixes contain a large amount of data of a statistical nature, and there is a selected bibliography of books, periodicals, and pamphlets relating both to the general subject of health and to specific diseases.

NATIONAL INDUSTRIAL CONFERENCE BOARD. *The Kansas Court of Industrial Relations*. New York, 1924. iii, 103 pp. Research report No. 67.

This study considers the Kansas Court of Industrial Relations under the headings: The background of the court, economic and political; Legal basis and nature of the court, involving its legal interpretation and a comparison with other institutions; The experience and work of the court, including its relation to strikes and stoppages, the protection of employers' and employees' interests, and its relation to public opinion and political influences; Problems involved in the court; and a general summary and conclusions. An appendix presents the text of the act.

— *Proceedings of the national immigration conference held in New York City December 13 and 14, 1923*. New York, 10 East 39th Street, 1924. viii, 272 pp. Special report No. 26.

A report of a meeting called by the National Industrial Conference Board to discuss a national immigration policy which would protect the institutions and social life of the United States and also provide fairly for the normal economic

requirements of the country. The plans for the conference stipulated that there should be no formal vote on the subject of immigration. Among the matters upon which a broad unanimity of opinion was manifested was the need for a commission under the authority of the President to inquire into various important factors in the problem of immigration.

NEW YORK, UNIVERSITY OF THE STATE OF. *Organization and administration of part-time schools in manufacturing or mercantile establishments and in factories.* Albany, 1923. 20 pp. Bulletin No. 790.

Gives the laws and regulations relating to part-time schools and classes carried on by employers in their own establishments and illustrates the possibilities of such work by describing the private part-time schools maintained by several large employers in New York State.

PHELPS, EDITH M. *Restriction of immigration.* New York, H. W. Wilson Co., 1924. 118 pp. *The reference shelf*, Vol. II, No. 5.

A collection of briefs and reprints of articles concerning the problem of the further restriction of immigration. The volume also includes a selected bibliography.

SOCIÉTÉ DE LÉGISLATION COMPARÉE. *Annuaire de législation française contenant le texte des principales lois votées en France en 1922.* Paris, 20 rue Soufflot, 1923. 248 pp.

This compilation contains the text of the principal laws passed by the French Parliament during 1922, including legislation relating to labor.

STELLA, ANTONIO. *Some aspects of Italian immigration to the United States: Statistical data and general considerations based chiefly upon the United States censuses and other official publications.* New York, G. P. Putnam's Sons, 1924. xxii, 124 pp. Illustrated.

The purpose of the author in this volume is to discuss and throw light upon those features of the Italian immigration problem "which are least understood and most frequently misrepresented." He emphasizes the immeasurable contributions which Italy has made and may be relied upon to make in future to civilization, pointing out how Italians have played the part of pioneers in modern science. He endeavors to refute certain charges regarding Italian immigration that he holds have no factual foundation.

TRADES-UNION CONGRESS AND THE LABOR PARTY. *Social insurance and trade-union membership.* London, S. W. 1, 32 Eccleston Square, [1923]. 28 pp.

Discusses the relative advantage to the workers of having the various kinds of social insurance administered by the Government, the employers, or the workers. Health insurance, it is held, being a community responsibility, should be administered by the community, but unemployment insurance, being an industrial responsibility, is on a different footing. The authors set forth reasons for considering that the unions form the best agency for administering unemployment insurance, but admit that the Government machinery, though cumbersome and expensive, works fairly well. Administration by employers' associations, they believe, would be distinctly harmful to the workers, giving them a dangerous control over the mobility of labor and opening the door to easy abuses in the way of denying insurance. Moreover, it is pointed out, no employers' association is apt to be sufficiently extensive to cover the field when it comes to finding employment for the workless. If it were, it would simply duplicate the work of the exchanges, which are already in operation; if it were not, the unemployed worker would be obliged to go to the employers' headquarters to draw his insurance and to the exchanges to secure a possible opening for work, and an elaborate interchange of information between the two organizations would be necessary, all of which would involve expense, trouble, and loss of time, without any compensating gain in efficiency.

Trade-unions are urged to make a strong effort to bring all their members into a trade-union approved society, thus securing their own administration of the unemployment insurance. By way of showing what can be done in this direction, the report cites the National Union of Railwaymen, which by the end of 1921 had 96,000 of its membership insured through its own approved society.

WARE, NORMAN. *The industrial worker, 1840-1860: The reaction of American industrial society to the advance of the industrial revolution.* Boston, Houghton Mifflin Co., 1924. xxi, 249 pp.

The first prize for the year 1922, given by Hart, Schaffner & Marx for essays on economic or commercial subjects, was awarded to the author of this book. The study deals with the industrial revolution from 1840 to 1860, a period in which the importance of the changing industrial relations resulting from the introduction of machine production had been largely obscured by the antislavery movement. The Civil War terminated this period and few of the national craft organizations started during this time survived it, with the result that "the labor movement in America finished the period 1840-1860 as it had begun—practically in nothingness."

WRIGHT, HELEN S. *Coal's worst year.* Boston, Richard G. Badger, 1924. 202 pp.

This story of the coal situation in 1922-23 includes an account of the Herrin massacre and the trials of the mob leaders, of the efforts to settle the general strike by the Federal Government and by the States affected, and the work of the Federal Coal Commission, a discussion of the hardships resulting in individual instances from the coal shortage following the strike, and suggestions as to measures which might be taken to avoid a repetition of these occurrences and assure a normal functioning of the industry.